WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Application for Use of State-owned Aquatic Lands

Applicant Name:	GEMS, LLC
County:	Skagit County
Water Body:	Guemes Channel
Type of Authorization - Use:	Has current Lease, reviewing use
Authorization Number:	22-A02335
Term:	30 years
Description:	The Department has received a JARPA application and is in the process of reviewing the proposed change in use.

Date of Public Notice: 3-9-2010

2009
WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form [help]

Revision Date: 12-02-2009

USE BLACK OR BLUE INK TO ENTER ANSWERS IN WHITE SPACES BELOW.

US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

Part 1–Project Identification

Unique project information that makes it easy to identify. [help]

1a. Unique Project Identifier Number (UPI #)
619049-09-01
1b. Project Name:
GEMS Pier Renovation

Part 2–Applicant

The person or organization legally responsible for the project. [help]

2a. Name:			
GEMS, LLC			
2b. Mailing Address (Street or PO Box)			
2326 11th Street			
2c. City, State, Zip			
Anacortes, Washington, 98221			
2d. Phone (1)	**2e.** Phone (2)	**2f.** Fax	**2g.** E-mail
(360) 293-6747	( )	**(360) 293-9041**	**farah@gemsmarina.com**

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b. of this application.) [help]

3a. Name and Organization (if applicable)			
Ms. Farah Y. Ally, GEMS, LLC			
3b. Mailing Address (Street or PO Box)			
2326 11th Street			
3c. City, State, Zip			
Anacortes, Washington, 98221			
3d. Phone (1)	**3e.** Phone (2)	**3f.** Fax	**3g.** E-mail
(360) 293-6747	**(561) 441-4637**	**360-293-9041**	**farah@gemsmarina.com**

Part 4–Property Owner(s) [help]

Contact information for people or organizations owning the property(ies) where the project will occur. [help]

☒ Same as applicant. (Skip to Part 5.)

☒ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☐ There are multiple property owners. Complete the section below and use JARPA Attachment A for each additional property owner.

4a. Name (Last, First, Middle) and Organization (if applicable)			
4b. Mailing Address (Street or PO Box)			
4c. City, State, Zip			
4d. Phone (1)	**4e.** Phone (2)	**4f.** Fax	**4g.** E-mail
( )	( )	( )	

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☒ There are multiple properties or project locations (e.g., linear projects). Complete the section below and use JARPA Attachment B for each additional property.

5a. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5n.) [help]

2326 11th Street

5b. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Anacortes, Washington 98221

5c. County [help]

Skagit County

5d. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
03	13	35	01

5e. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N. lat. / -122.89142 W long

48.41567° N. lat / 122.631903° W long

5f. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

P31529, P31532, P31536

5g. Indicate the type of ownership of the property. (Check all that apply.) [help]

☒ State Owned Aquatic Land ☐ Tribal ☒ Private

☐ Other publicly owned (federal, state, county, city, special districts like schools, ports, etc.)

5h. Contact information for all adjoining property owners, lessees, etc. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)
See Attachment C		

5i. Is any part of the project area within a 100-year flood plain? [help]

☒ Yes ☐ No ☐ Don't know

5j. Briefly describe the vegetation and habitat conditions on the property. [help]

For the purposes of this JARPA form, there are essentially two areas of the property (project site). The first is waterward of mean higher high water (MHHW). The second is the upland portion, which is landward of MHHW.

Waterward of MHHW: At higher tide levels, this portion of the project site is covered by water. At lower tide levels, mixed sand and rocky tidelands with some aquatic vegetation (i.e. macroalgae or seaweed) are exposed. Additionally, eelgrass beds are located on the east and west sides of the existing pier between approximate elevations -2 feet and -10 (MLLW = 0.0' datum). Macroalgae occurs at varying densities in open sand and gravel/cobble sediments offshore of the pier to at least -25 ft

Landward of MHHW: This area consists of an existing gravel access road, which has been used to access this site from Anacortes for many years. On the water side of this gravel access road is a riprap revetment. On the upland side of the gravel access road is a vegetated bluff with a mixture of shrubs, bushes, plants, and trees.

See the Biological Evaluation for the project prepared by BioAquatics International, LLC for additional description of vegetation and habitat conditions at the project site.

5k. Describe how the property is currently used. [help]

The property is currently used for storage and office use. Personal property is stored in various sections of the existing buildings. A portion of one of building was converted to an office/meeting room, which is only used occasionally. (The meeting room is where the agency meeting was held in April 2009.) The remaining sections of the buildings are vacant. There is some fencing and gates at the buildings, which prevents entrance by the public. There is also a locked gate across the existing gravel access road, which prevents vehicular access to the pier by the public.

5l. Describe how the adjacent properties are currently used. [help]

The adjacent properties are private residences located at the top of the adjacent bluff.

5m. Describe the structures (above and below ground) on the property, including their purpose(s). [help]

A large timber pier is located on the project site. The total area of the pier is approximately 54,762 square feet. Of that total, 52,563 square feet are located waterward of mean high water (MHW) and 2,199 square feet are located landward of MHW. The pier is on founded on 726 piles (462 creosote treated timber, 238 concrete and 26 steel). Timber pile caps, stringers and decking comprise the principal elements of the pier support system.

Two large buildings and several smaller buildings are located on the deck surface of the pier. These structures cover approximately 80% of the pier deck. The buildings are wood frame with metal roofing and range from one to two stories in height. A portion of the roof of one building has partially collapsed. Various sections of decking are also in disrepair. The pier is fenced and gated to prevent unauthorized access from the uplands.

The existing buildings are currently not in service, except for the previously mentioned limited storage and the existing office and meeting room, which are used occasionally.

A rock riprap revetment is located along the length of the project site. This structure was originally constructed to protect a railroad line that ran parallel to shoreline. The revetment currently provides wave erosion protection to the upland elements of the existing site, including the access road and the former railroad right of way. The revetment also provides secondary wave erosion protection to the existing bluff and the homes located at the top of the bluff.

A reinforced concrete retaining wall is located near the western end of the project site. This wall helps to support the access road.

5n. Provide driving directions from the closest highway to the project location, and attach a map. [help]

From I-5 take the Anacortes/hwy 20 West exit. Head west on hwy 20 to Anacortes, Go North on Commercial Avenue, turn left on 12th Street (hwy 20). Turn right onto B Avenue go down the private access road which dead ends at the cannery.

Part 6–Project Description

6a. Summarize the overall project. You can provide more detail in 6d. [help]

The proposed project will include the renovation of the existing timber pier. The existing pier will be replaced with a new concrete pier structure founded on new steel piling. Three new wood-framed buildings will be constructed on the new deck pier: (1) a three-story 32-room motel building; (2) a two-story restaurant and lounge building that is expected to seat 100 patrons on the first floor and seat 86 patrons on the second floor; and (3) a one-story accessory building that will provide support facilities (mechanical and electrical equipment) for the motel and restaurant. A portion of the accessory building will also be available for kayak and other water-related rentals. Sections of the perimeter pier deck will be open to the public for viewing and fishing purposes.

A small floating marina will be located waterward of the renovated pier. The marina will provide moorage slips for five small boats (40 feet ±) and approximately 335 lineal feet of additional moorage space (not designated as slips). All moorage will be short-term moorage, which could provide support to restaurant and motel operations or be utilized by restaurant or motel guests or the public. Because the marina will not be protected by a breakwater/wave attenuator system, moorage at the marina will likely be limited to a seasonal basis (fair weather conditions).

Access to the renovated pier will be from an existing gravel access road from B Avenue. This gravel access road will be reconstructed and widened to accommodate two way traffic and emergency vehicles. The access road will be constructed with an asphalt surface, concrete curbs and gutters on the upland side and concrete retaining walls. A public trail will be located on the waterward side of the access road.

Public access to the shoreline will be allowed along the entire length of the property (± 1,600 lineal feet). Two sets of stairs will provide public access from the upland trail to the beach located on either side of the renovated pier. Public access on and around the renovated pier will be available for fishing, enjoying the view and other water related activities. Public use of the shoreline will be allowed for kayaking, canoeing, diving, snorkeling, etc. The public trail will be constructed on the landward side of the existing riprap revetment. Ultimately, this trail will connect to the City of Anacortes' city trail system (from March Point to Washington Park). Public access to this trail will be allowed from the property, which will provide hiking, biking, running, walking, etc. along the shoreline.

See Section 6d for additional project description.

6b. Indicate the project category. (Check all that apply.) [help]

☒ Commercial ☐ Residential ☐ Institutional ☐ Transportation ☒ Recreational
☒ Maintenance ☒ Environmental Enhancement

6c. Indicate the major elements of your project. (Check all that apply.) [help]

☐ Aquaculture	☒ Culvert	☒ Float	☒ Road (driveway)
☒ Bank Stabilization	☐ Dam / Weir	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat House	☐ Dike / Levee / Jetty	☒ Land Clearing	☒ Stairs
☐ Boat Launch	☐ Ditch	☒ Marina / Moorage	☒ Stormwater facility
☐ Boat Lift	☒ Dock / Pier	☐ Mining	☐ Swimming Pool
☐ Bridge	☐ Dredging	☒ Outfall Structure	☒ Utility Line
☐ Bulkhead	☐ Fence	☒ Piling	
☐ Buoy	☐ Ferry Terminal	☒ Retaining Wall (upland)	
☐ Channel Modification	☐ Fishway		

☐ Other: _____

6d. Describe how you plan to construct each project element checked in 6c. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year flood plain.

OLD PIER REMOVAL:

Pier and Buildings: The existing pier and the buildings located on the pier will be removed with a combination of land based equipment and marine equipment. Removed materials will be loaded onto barges and trucks for disposal at approved upland disposal sites. Selected timbers and building materials removed during the process will be reused in the new buildings to retain the historic nature and feel of the former cannery site. Best management practices will be utilized during the process to minimize debris discharges into Guemes Channel.

Pier Piling: All existing pier piling will be removed. In order to avoid conflicts with new pier piling, approximately 130 existing piles will be fully extracted from the bottom by vibratory hammer and/or direct crane barge pull. Clean sand will then be filled into the holes left by the extracted piles. The remaining approximate 596 piles will be cut below the mud line and then capped with clean sand. Approximately 0.1 cubic yards of sand will be used to fill each hole left by an extracted or cut pile. A total of approximately 73 cubic yards of sand will be placed into the pile holes for this project. All extracted and severed piles will be loaded on barges and trucks. Creosote treated timber piles will be cut into 6-foot sections and disposed of at an approved upland site. Best management practices will be utilized during the pile removal process to (1) minimize bottom sedimentation generated by extracting or cutting the existing piles, (2) control creosote oil releases from timber piles, and (3) control the placement of clean sand in the pile holes.

NEW PIER CONSTRUCTION:

Pile Installation: The replacement pier will be constructed with a combination of land based equipment and marine equipment. Approximately 348 new steel piles will be required to support the new pier and the new buildings to be constructed on the pier deck. The piles will range in diameter from 18 to 24 inches. The piles will be hot-dip galvanized and/or protected with a corrosion resistance coating before shipment to the project site.

A floating derrick barge may be used to the install all of the piles. Nearshore piling will be installed at high tide levels to prevent the barge from grounding. Piles located in deeper water could be installed at lower tide levels. As an alternative to the derrick barge, land based equipment may be used to install the pier piling. A mobile pile driver will first install nearshore piling from the existing uplands. The crane will then move seaward, using the installed piles with temporary (or permanent) pile caps and stringers as support. The crane will continue to advance seaward until all piles have been installed.

Depending on the required pile penetration, two different pile installation methods will be used. For shallower depth piles, a vibratory hammer may only be needed to install the piles. For deeper piles, a vibratory hammer may be used to start the pile installation process but an impact hammer may be needed to drive the pile to the necessary depth and bearing. Refer to the project geotechnical report by AMEC Earth and Environmental for design recommendations regarding pile installation.

All new piles will be installed per the requirements of the Washington Department of Fish and Wildlife, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. Pile installation for the new pier could take between 2 and 3 months.

Pier Substructure: The new pier substructure will consist of precast concrete pile caps and panels. It is likely that construction of the pier substructure will start near shore and proceed incrementally seaward to the end of the pier using land-based equipment. It is also possible that floating equipment could be used to install the pier substructure. Best management practices will be utilized to minimize debris entering Guemes Channel.

Pier Deck: A cast-in-place reinforced concrete deck will be installed on top of the pier substructure. Concrete from land based pre-mix concrete trucks will be poured and/or pumped onto the pier substructure to the form the pier deck. Temporary forms will be installed on the pier substructure to contain the concrete and prevent leakage into Guemes Channel. It is likely that the construction of the pier deck will start at the landward end of the pier and then proceed seaward to the end of the pier.

Construction of the pier substructure and deck could take between 2 and 3 months.

Marina: A floating pile driver will be required to install the galvanized steel guide piles for the marina. The 24-inch diameter piles will be installed with a vibratory hammer. Some piles may need to be proofed with an impact hammer to achieve the required penetration. All guide piles will be installed per the requirements of the Washington Department of Fish and Wildlife.

The marina's floating pier will consist of prefabricated float units that will be trucked and/or barged to the project site. The floats will then be assembled and floated into position for pile installation.

An 80-foot long aluminum gangway will be installed to connect the floating pier to the fixed pier. The gangway will have light permeable grating similar to the fixed pier grating. Various utilities will be extended from the fixed pier down the gangway to the floating pier.

Construction of the marina will likely take between 1 to 2 months.

Pier Grating: As part of the construction of the pier deck, approximately 700 lineal feet of light permeable grating will be installed along the perimeter of the new pier. The width of the grating will be five feet. The grating will be ADA compliant and have a minimum open area of 60%. A walkway crossing the access driveway turnaround will also be fully grated.

Pier Buildings: After the pier deck is installed, the motel, restaurant and the accessory building will be constructed on top of the pier. It is likely that these buildings will be wood framed structures. Standard construction techniques for that industry will be employed. Best management practices will also be utilized to minimize debris discharges into Guemes Channel. Construction of the buildings could take between 9 and 10 months.

Pier Stormwater Runoff: At present, stormwater runoff from the pier deck flows directly into Guemes Channel without control or water quality treatment. Developed conditions propose to improve stormwater quality by (1) paving the pier deck and (2) grading the pier such that the pollution generating surfaces drain to catch basins. The catch basins will convey the stormwater through pipes to three separate catch basin type StormFilter devices on the pier, which provide water quality treatment prior to discharge to Guemes Channel. A portion of the pier's stormwater runoff (at its landward end) will be directed to a manhole type StormFilter that will be located on the uplands. A more detailed discussion of these StormFilter devices is provided below under the heading Upland Construction, subsection Stormwater Runoff.

The proposed motel, restaurant & accessory building roofs will be constructed of non-pollution generating material. Roof downspouts will be plumbed through the pier deck with direct discharge to Guemes Channel or to plumbed to landscaping containers for irrigation.

UPLAND CONSTRUCTION:

Public Access: As part of the construction of the access road, a public trail will be installed along the waterside edge of the access road. The trail will be surfaced with stamped asphalt or concrete. This trail will provide public access from B Avenue to the site. The trail will connect with the pier and then continue eastward along the former railroad right of way to the eastward limit of the project site. The surface of this trail will be asphalt. The total length of the trail system from B Avenue to the east property line will be approximately 1,600 lineal feet.

Two sets of stairs located on either side of the pier will provide public access from the trail to the project beach. The stairs will be constructed of reinforced concrete. Existing riprap will be removed to accommodate the stairs.

Access road: The existing access road to the pier will be reconstructed from its connection with B Avenue to the pier. The purpose of the access road is to provide two-way traffic and emergency vehicle access to and from the pier. Construction of the access road will include construction of retaining walls, grading and filling, and asphalt paving.

As part of the access road construction, five parallel parking stalls will be constructed adjacent to the access road near the pier's shore connection.

Best management practices including sedimentation and erosion control measures will be utilized during construction of the access road and parking area to minimize runoff into Guemes Channel.

Stormwater Runoff: At present, stormwater runoff from the project site including the gravel access road and the pier deck flows directly into Guemes Channel without control or water quality treatment. Developed conditions propose to improve stormwater quality by (1) stabilizing the access road with a paved surface; (2) grading the paved surfaces (i.e. access road and pier deck) to drain to a stormwater collection system; and (3) install storm drain pipes that will convey the stormwater to one of 5 catch basin type StormFilter devices or a manhole type StormFilter device, which provide water quality treatment prior to discharge to Guemes Channel. A StormFilter is a device approved by the Washington State Department of Ecology that utilizes media cartridges to filter pollutants from stormwater runoff. Media cartridges are replaced when they become full of captured

pollutants. Manufacturer cut-sheet information for the StormFilters are available in a separately bound Conceptual Drainage Control Report prepared by Layton & Sell, Inc., P.S. (dated December 2, 2009). StormFilter cut-sheet information is also available at http://www.contech-cpi.com/stormwater/products/14.

Other storm drainage improvements will include consolidating the numerous stormwater outfalls that exist along the length of the property (approximately 1,600 lineal feet). These outfalls collect stormwater runoff from the residences and the streets at the top of the bluff. Developed conditions propose to consolidate 15 of these existing outfalls (ranging in size from 4-inch diameter to 8-inch diameter) into three (3) proposed outfalls (one 15-inch diameter and two 12-inch diameter). In addition, three existing outfalls to the east of the pier will be improved by providing a better tight-line connection to Guemes Channel to minimize future erosion and sloughing of the bluff. The outfalls are all proposed to daylight above the elevation of MHHW which is elevation 8.30 feet (on MLLW=0.0 feet datum). The 15-inch diameter outfall will daylight at elevation 8.44 feet and the others will daylight between elevations 10 and 13 feet.

Utilities: Water, fire, sewer, gas, communication, and electrical power utilities will be extended from the D Avenue to the project site. The utilities will be installed by the open trench and bury method. The utility trench surface will be restored with a geocell system backfilled with topsoil and then planted to minimize erosion of the bluff slope.

The existing pier's sewage lift station will be replaced with a new upgraded lift station to be located on the uplands adjacent to the pier's shore connection. Sewage from the motel and restaurant will flow by gravity in a tight-lined pipe suspended below the pier to the lift station. Sewage from the restaurant will pass though a grease trap before discharge to the lift station. The lift station will pump the collected sewage to an existing sanitary sewer manhole located in D Avenue.

Shoreline Planting Enhancement: Developed conditions propose to enhance 4,859 square feet of shoreline with new and amended shoreline planting and to preserve 2,328 square feet of existing shoreline plantings. About 204 square feet (7.3 cubic yards) of the existing shoreline rock revetment is proposed to be replaced with new shoreline plantings. Refer to JARPA drawing sheets 33 through 39 for shoreline planting details.

6e. What are the start and end dates for project construction? (month/year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

Start date: **July 2010 (in-water work)** End date: **December 2012**

☐ See JARPA Attachment D

6f. Describe the purpose of the work and why you want or need to perform it. [help]

The primary purpose of the proposed work is to renovate an existing degraded pier with new, modern materials such that it can support viable commercial operations and offer significant public access to the pier and shoreline. The existing pier was originally constructed in 1915 as a salmon cannery. Now, after nearly a hundred years of use the pier is in need of complete renovation.

Currently, no public access is provided to the project site. Construction of the replacement pier will provide public access to approximately 1,600 lineal feet of shoreline and beachfront along Guemes Channel. Public access will also be provided on the renovated pier in the form of a perimeter walkway system that is over 700 feet long. Public access during daylight hours will also be allowed on the marina for viewing and fishing purposes. Short term and longer-term moorage at the marina will also be available to the public on a rental basis. Finally, the public will be able to dine at the restaurant and reside at the motel.

Additionally, a public trail will be constructed along the old railroad grade adjacent to the shoreline (the length of the project site). This trail will be a segment of the future City of Anacortes trail system, which, when complete, will connect downtown Anacortes to Washington Park (beyond the Washington State Ferry Terminal). The proposed project will represent a major section of the trail system.

The proposed project will help improve the economic vitality of the City of Anacortes by creating jobs and offering a destination for tourists located outside of Anacortes. The public access features of the project will also provide a significant opportunity for the citizens of Anacortes, Skagit County and the public at large to enjoy a segment of Guemes Channel that is not presently available.

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

$14 million

6h. Will any portion of the project receive federal funding? [help]

- **If yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☐ Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☐ Not applicable

7b. Will the project impact wetlands? [help]

☐ Yes ☐ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☐ Yes ☐ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- **If yes**, submit the report, including data sheets, with the JARPA package.

☐ Yes ☐ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- **If yes**, submit the wetland rating forms and figures with the JARPA package.

☐ Yes ☐ No ☐ Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- **If yes**, submit the plan with the JARPA package.

☐ Yes ☐ No ☐ Not applicable

7g. Use the table below to list the type and rating of each wetland that will be impacted; the extent and duration of the impact; and the type and amount of compensatory mitigation proposed. If you are submitting a compensatory mitigation plan with a similar table, you may simply state (below) where we can find this information in the mitigation plan. [help]

Activity causing impact (fill, drain, excavate, flood, etc.)	Wetland type and rating category[1]	Impact area (sq. ft. or acres)	Duration of impact[2]	Proposed mitigation type[3]	Wetland mitigation area (sq. ft. or acres)

[1] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

[2] Indicate the time (in months or years, as appropriate) the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

[3] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7h. For all filling activities identified in 7g., describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

7i. For all excavating activities identified in 7g., describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

7j. Summarize what the compensatory mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

The project is designed to minimize adverse impacts to the aquatic environment by:

- **Conducting all work in accordance with allowable work windows determined by the Washington Department of Fish and Wildlife and the U. S. Army Corps of Engineers.**
- **Incorporating non-polluting materials into the construction of the renovated pier and the marina.**
- **Removing creosote treated materials from the aquatic environment.**
- **Avoiding construction activities over existing eelgrass beds.**
- **Providing stormwater treatment to runoff from the onshore and offshore parking and access road surfaces.**
- **Employing best management practices during construction to prevent sediment intrusion, accidental spills, and other environmental impacts to the aquatic environment.**

In addition to the above measures, the proposed renovation of the pier will result in a slight reduction in overwater coverage of the project site as described below:

The existing pier structure waterward of the face of the bulkhead covers approximately 54,762 square feet (52,563 square feet below mean high water and 2,199 above mean high water). The proposed renovated pier will have a total waterward area of approximately 52,371 square feet (50,266 square feet below mean high water and 2,105 square feet above mean high water). Additionally, the proposed marina will contain approximately 4,486 square feet (all below mean high water). The total square footage of the renovated pier and marina will be 56,857 square feet, 4,624 square feet of which will have light permeable grading (60% permeable). Thus, the total overwater coverage will be 54,083 square feet. This is a net reduction of 679 square feet from the existing structure.

See the biological evaluation prepared by Bio Aquatic International, LLC for additional discussion on mitigation of aquatic impacts.

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐ No

8c. Summarize impact(s) to each **waterbody** in the table below. [help]

Activity causing impact (clear, dredge, fill, pile drive, etc.)	Waterbody name	Impact location[1]	Duration of impact[2]	Amount of material to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Pile Removal	Guemes Channel	In water	2 months	73 cubic yards of clean sand	
Pier Demolition	Guemes Channel	In water	3-4 months		54, 762 sq ft
Install Pier and Piles	Guemes Channel	In water	4-6 months	348 new piles	51,924 sq ft
Construct Buildings on Top of Pier Deck	Guemes Channel	Above water surface	9-10 months	None – all work above water surface	13,600 sq ft footprint of 3 buildings on pier deck
Install Marina	Guemes Channel	In water	1-2 months	15 new piles	4,450 sq ft
Install Beach Stairs	Guemes Channel	Shore edge	1-2 weeks	1 cubic yard of conc.	20 sq ft
Access road	Guemes Channel	Adjacent	1-2 months	None	None

Construction					
Utility Extension	Guemes Channel	Adjacent	1-2 months	None	None
Upland Stormwater Outfalls	Guemes Channel	Adjacent	1-2 months	None – inverts above MHHW	None
Public Trail	Guemes Channel	Adjacent	1-2 months	None	None

[1] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

[2] Indicate the time (in months or years, as appropriate) the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8d. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]

- **If yes**, submit the plan with the JARPA package.

☒ Yes ☐ No ☐ Not applicable **(See Biological Evaluation for discussion on mitigation)**

8e. Summarize what the compensatory mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7j., you do not need to restate your answer here. [help]

The compensatory mitigation plan establishes certain measures to be performed that will allow the finished project to enhance the associated marine habitats (these are in addition to those elements discussed in 8a). The following summarizes key elements of the plan:

- **The existing pier has been located at the project site for 94 years, covering approximately 54,762 square feet of water surface and bottom area. The renovated pier will cover approximately 52,371 square feet of water surface, which will include 4,624 square feet of light permeable grating along the perimeter of the pier. The grating will have 60% open area. The purpose of the grating is to facilitate more light beneath the pier to allow easier migration for fish under the pier.**
- **At the shore end of the renovated pier, the center of the access road turnaround on the pier deck will be open to the water in the form of a large light well. The diameter of the light well is roughly 35 feet. The light well will aid the nearshore migration of fish by introducing light into an area that has been shaded for nearly 10 decades. The light well may also stimulate plant growth on bottom habitat within the area of the well.**
- **A narrow bridge (6 feet wide) will cross the center of the light well to connect the east and west public trails. The bridge decking will be fully grated with light permeable grating that has 60% open area.**
- **The deck of the 6' x 80' gangway linking the renovated fixed pier to the marina element of the project will be fully grated with light permeable grating that has 60% open area.**
- **The overall project (pier and marina) will result in a slight reduction in over water coverage or shading (679 square feet) from the existing condition.**
- **Large concrete debris and other non-native material will be removed from the beach immediately adjacent to and beneath the pier to improve habitat conditions in the upper intertidal area.**
- **Native landscape pockets and plantings along the shoreline will be installed over the full shoreline length of the site resulting in 4,859 square feet of new or amended shoreline planting and 2,328 square feet of preserved existing shoreline plantings.**
- **Finally, the project site has been closed to the public for nearly a century. However, with the proposed pier renovation project nearly 1,600 lineal feet of shoreline along Guemes Channel will be opened to the public for viewing and beach walking. In addition, the renovated pier and marina will provide fishing and additional viewing opportunities.**

8f. For all activities identified in 8c., describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

Fill for Piling Holes: The material placed in the holes left by the cut pilings and extracted pilings will be clean sand from a local gravel or sand pit. Approximately 0.1 cubic yards of sand will be placed in each hole. There are 726 piles. The total amount of clean sand fill will be approximately 73 cubic yards.
Fill for Public Beach Stairs: Approximately 1 cubic yard of concrete will be placed at or slightly below ordinary high water (MHHW) for the two beach access stairways. See 8g below for additional information.

8g. For all excavating or dredging activities identified in 8c., describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

Public Beach Stairs: Approximately 25 cubic yards of existing rock riprap will be removed by land-based equipment for the two new public access stairways to the beach. The extracted riprap will be disposed of on the uplands. Premixed concrete transported by truck will be discharged and/or pumped into forms for the stairways. After curing, the forms will be removed. (Note that the proposed stairways will only extend below ordinary high water (MHHW) by about 1 foot, which will require about 1 cubic yard of concrete fill.)

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project.

9a. If you have already worked with any government agencies on this project, list them below. [help]

Agency Name	Contact Name	Phone	Most Recent Date of Contact
See attached list of agency participants at project site meeting held in April 2009		( )	
		( )	
		( )	

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 on the Washington Department of Ecology's 303(d) List? [help]

- **If yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wq/303d/.

☐ Yes ☒ No **(Guemes Channel is not on the 303(d) list)**

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

17110002 -- Strait Of Georgia Watershed

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #.

WRIA No. 3

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

- Go to http://www.ecy.wa.gov/programs/wq/swqs/criteria.html for the standards.

☒ Yes ☐ No ☐ Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

☐ Rural ☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☒ Other **Urban II**

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

☒ S ☒ F ☐ Np ☐ Ns

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If no**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Name of manual: **Stormwater Management Manual for Western Washington, February 2005**

9i. If you know what the property was used for in the past, describe below. [help]

This site was formerly a fish cannery. It opened in 1915 as a salmon cannery. In 1935, tuna canning was added. In 1937, the cannery was converted entirely to tuna canning. In the 1980's the property was no longer used as a cannery but was rented to a seafood processing company.

9j. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If yes**, attach it to your JARPA package.

☒ Yes ☐ No **(See Archaeological Investigation, prepared by ERCI)**

9k. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

Chinook salmon, bull trout, steelhead trout, marbled murrelet, killer whale, Steller sea lion, and humpback whale. See Biological Evaluation for details.

9l. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]

Native Species: Bivalves - Butter Clam, Little Neck Clam, Geoduck; Crab and shrimp - Dungeness Crab; Fish: Bull Trout, Chinook Salmon, Chum Salmon, Coho Salmon, Pink Salmon, Steelhead Trout; Birds - Brandt' Cormorant, Common Loon, Common Murre, Marbled Murrelet, Great Blue Heron, Brant, Western Grebe, Duck (various species), Snow Goose, Bald Eagle; Marine mammals - Harbor Seal, Killer Whale, Steller and California Sea Lion. Non-Native Species: Manila Clam, Pacific Oyster. Priority Habitats: Puget Sound Nearshore.

Part 10–Identify the Permits You Are Applying For

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.ecy.wa.gov/opas/.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

☐ A copy of the SEPA determination or letter of exemption is included with this application.

☒ A SEPA determination is pending with **City of Anacortes** (lead agency). The expected decision date is **February 2010**.

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.)

- Submit the Fish Habitat Enhancement Project form with this application. The form can be found at http://www.epermitting.wa.gov/Portals/_JarpaResourceCenter/images/default/fishenhancement.doc

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt? _____

☐ Other: _____

☐ SEPA is pre-empted by federal law. [help]

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☒ Substantial Development ☐ Conditional Use ☒ Variance

☐ Shoreline Exemption Type (explain): _____

Other city/county permits:

☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☒ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption

Washington Department of Ecology:

☒ Section 401 Water Quality Certification

Washington Department of Natural Resources:

☒ Aquatic Resources Use Authorization

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

☒ Section 404 (discharges into waters of the U.S.) ☒ Section 10 (work in navigable waters)

United States Coast Guard permits:

☐ General Bridge Act Permit ☒ Private Aids to Navigation (for non-bridge projects)

Part 11–Authorizing Signatures

Signatures required before submitting the JARPA package

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

_____ 12-12-09

Applicant Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

_____ 12·12·09

Authorized Agent Date

11c. Property Owner Signature (if not applicant) [help]

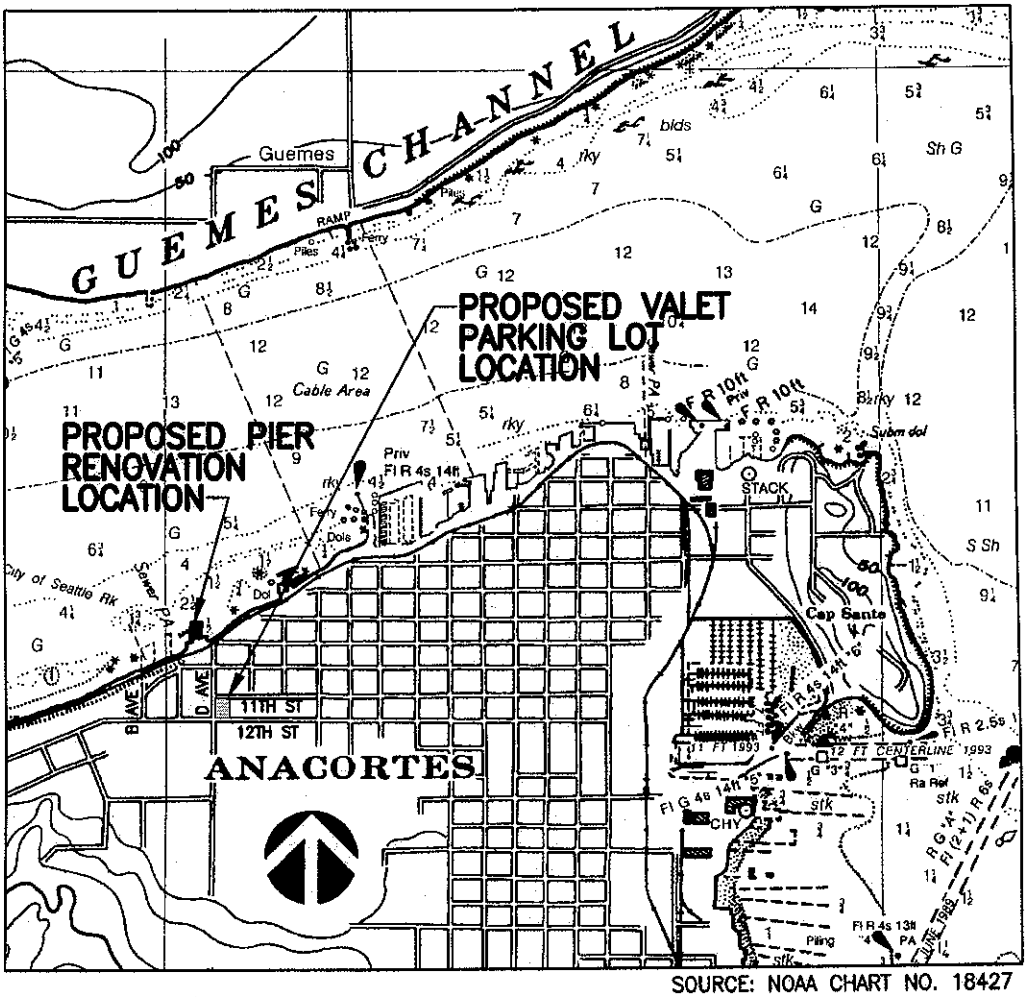
I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

_____ _____

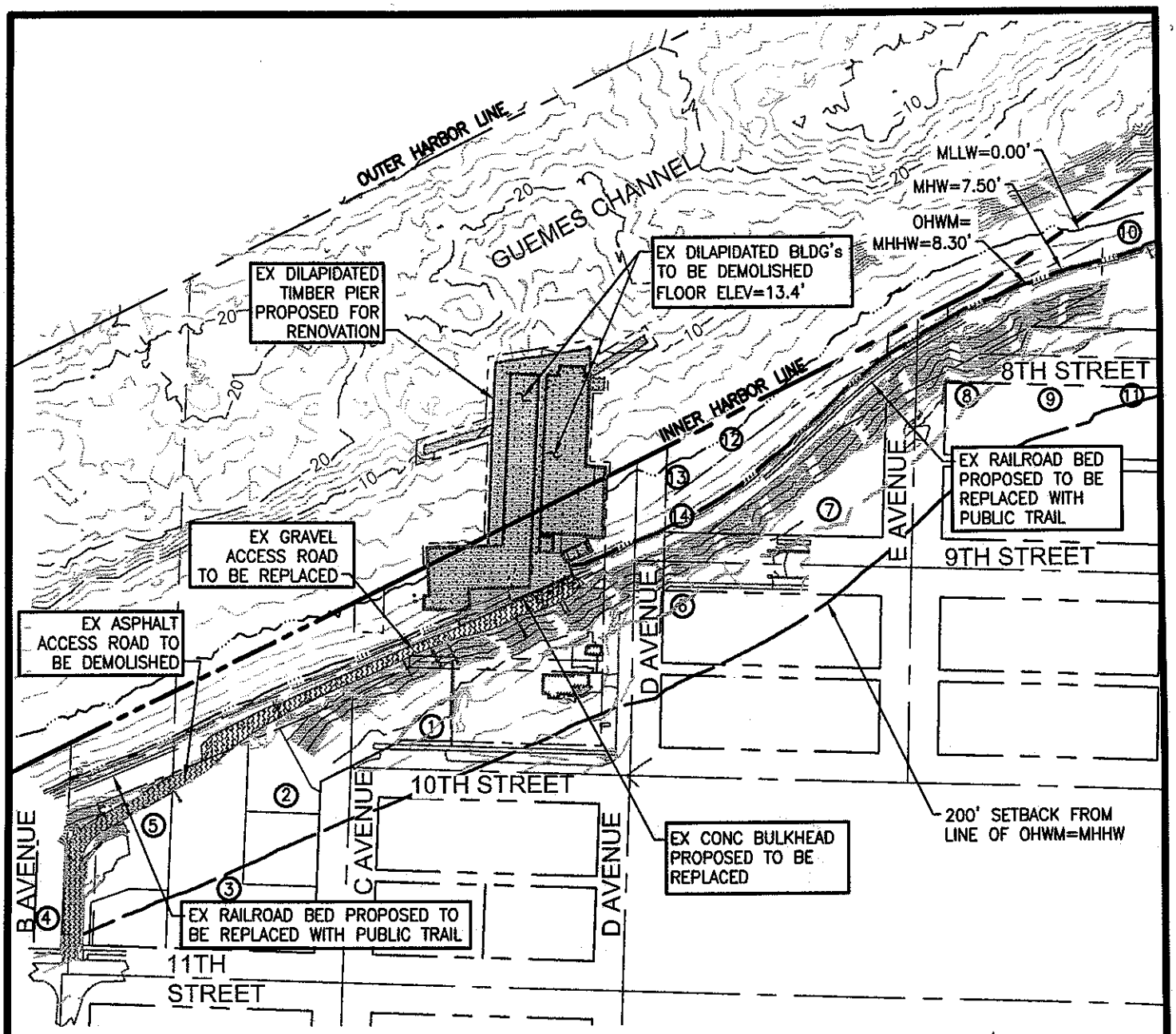
Property Owner Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or esentations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or ...ory, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact The Governor's Office of Regulatory Assistance (ORA). People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-019-09



APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE • Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735 • Fax: 825-1363 coastal & civil engineers	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567'N LONGITUDE: 122.631903'W	VICINITY MAP DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 1 of 39



SEE SHEETS 4 TO 6 FOR EXISTING CONDITION SITE PLANS

① = ADJACENT PROPERTY OWNER REFER TO JARPA ATTACHMENT C FOR PROPERTY OWNER INFORMATION

EX = EXISTING

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567'N LONGITUDE: 122.631903'W

EXISTING OVERALL SITE PLAN

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 2 of 39

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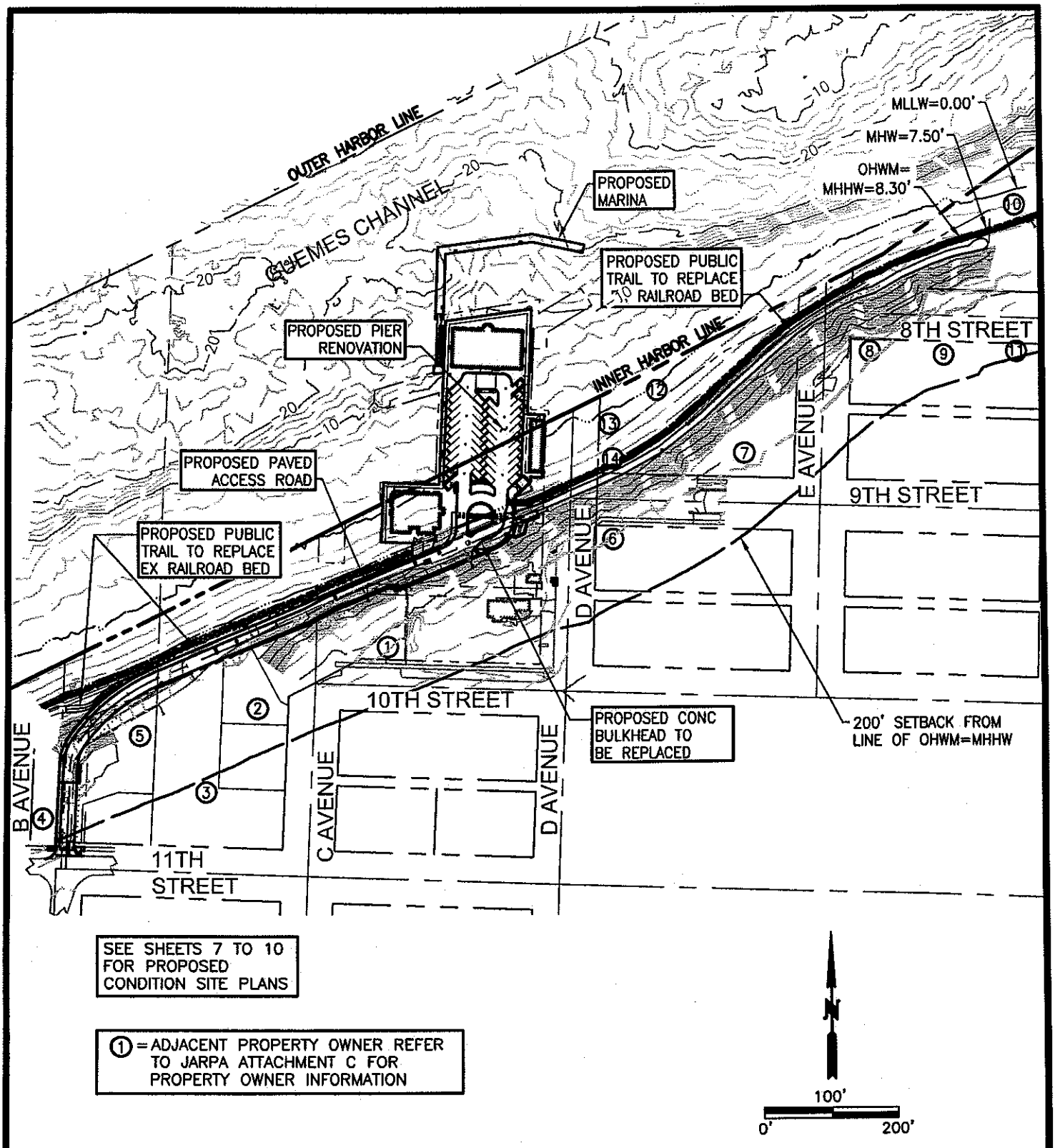

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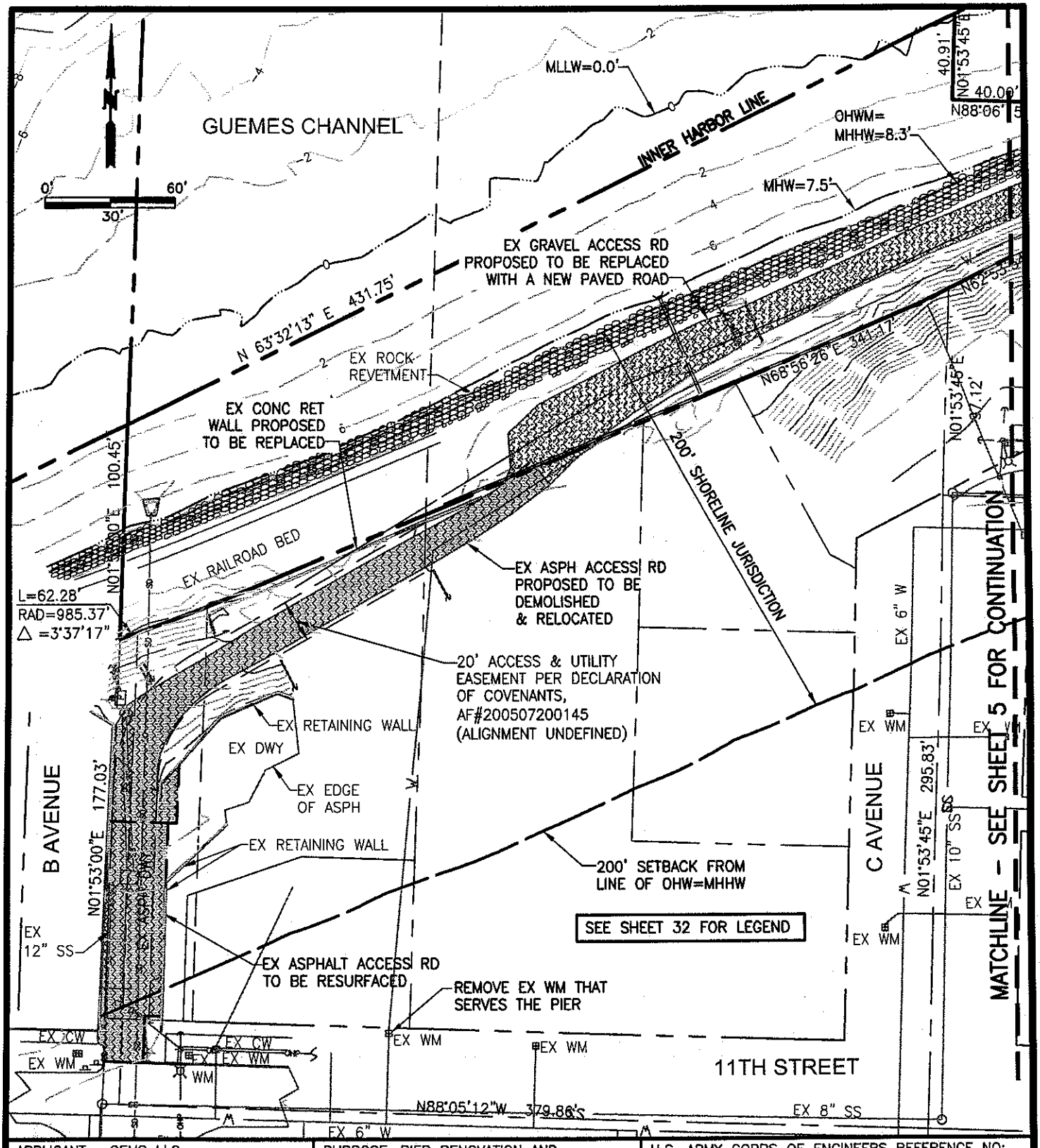

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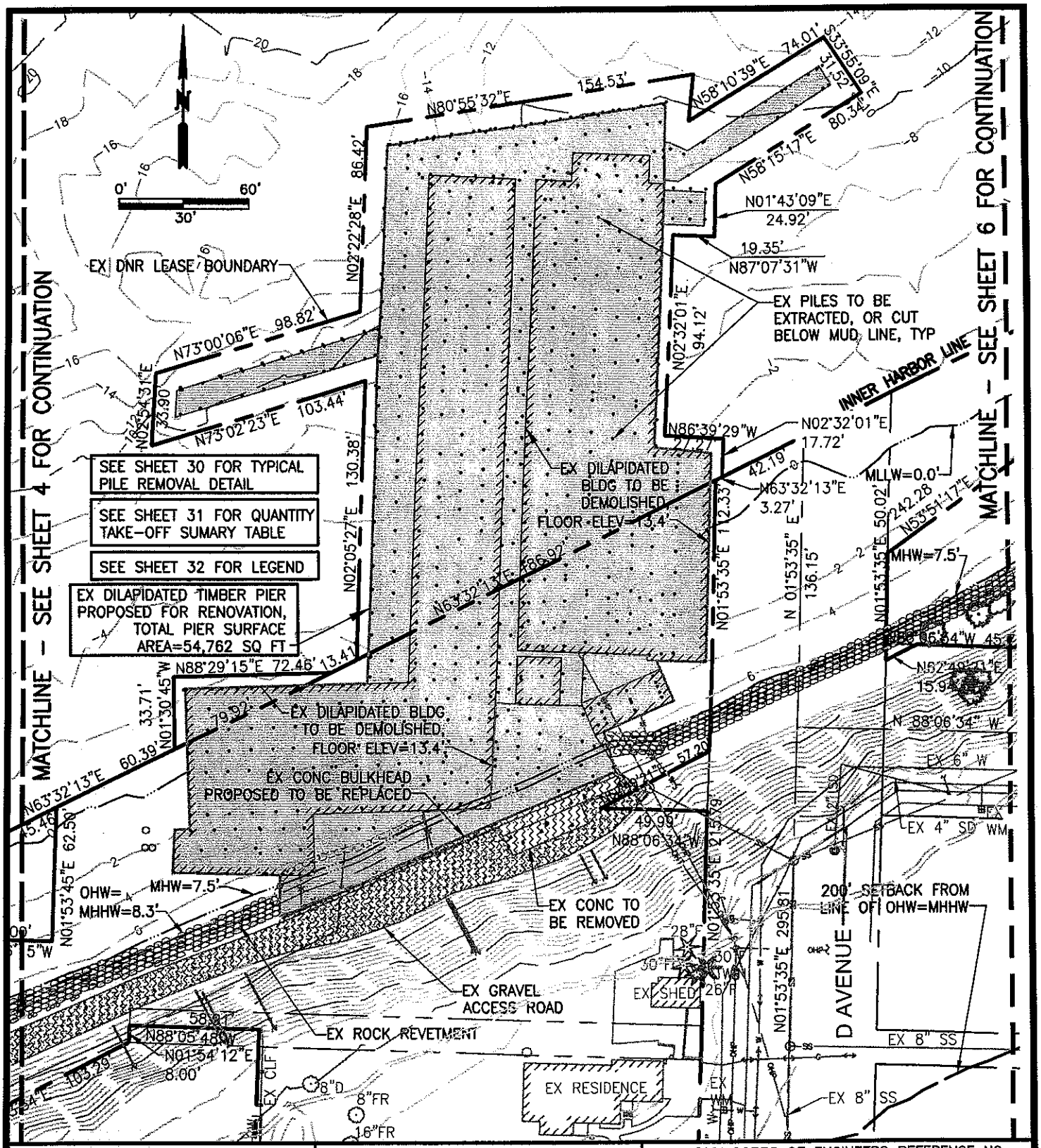

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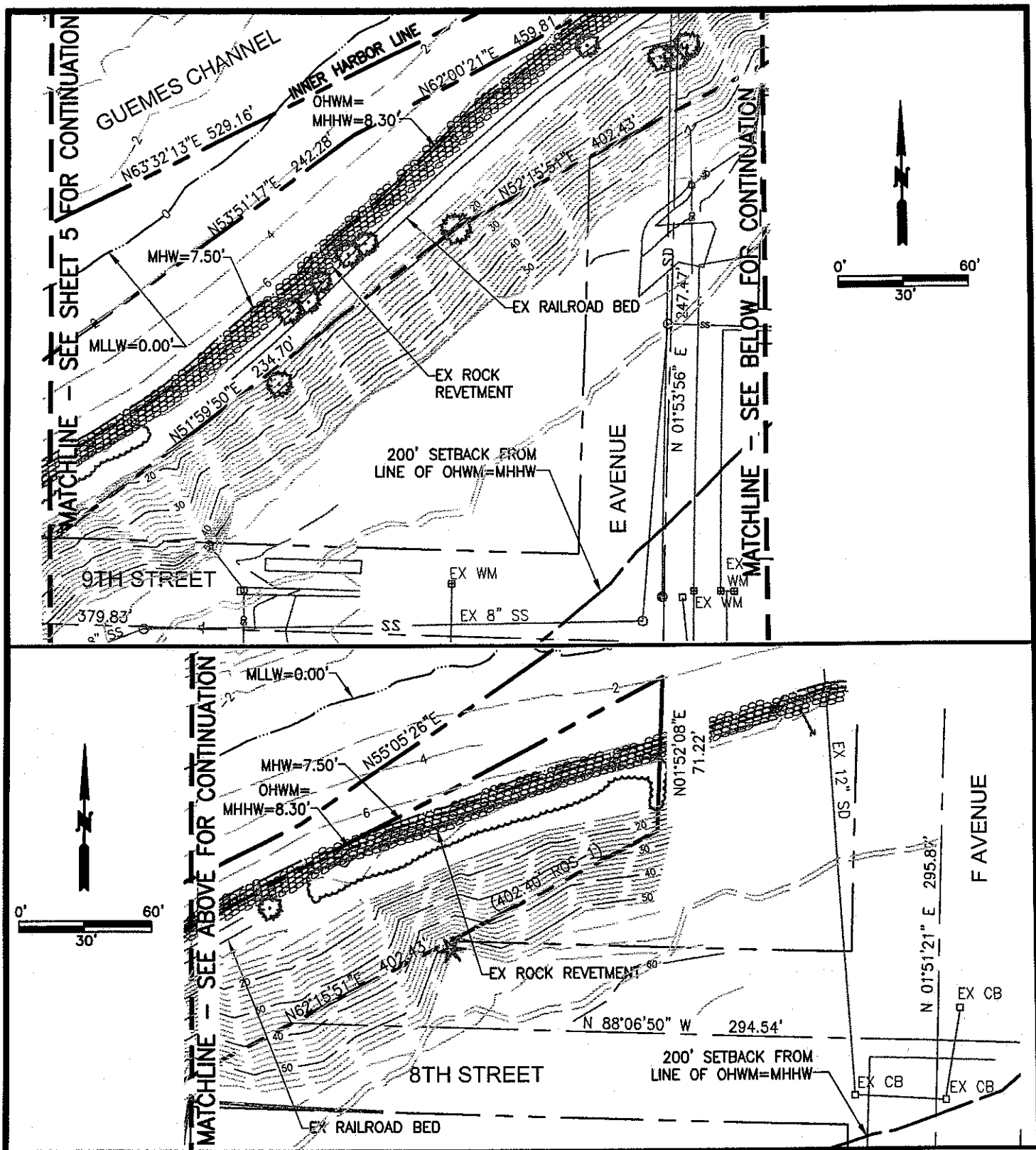

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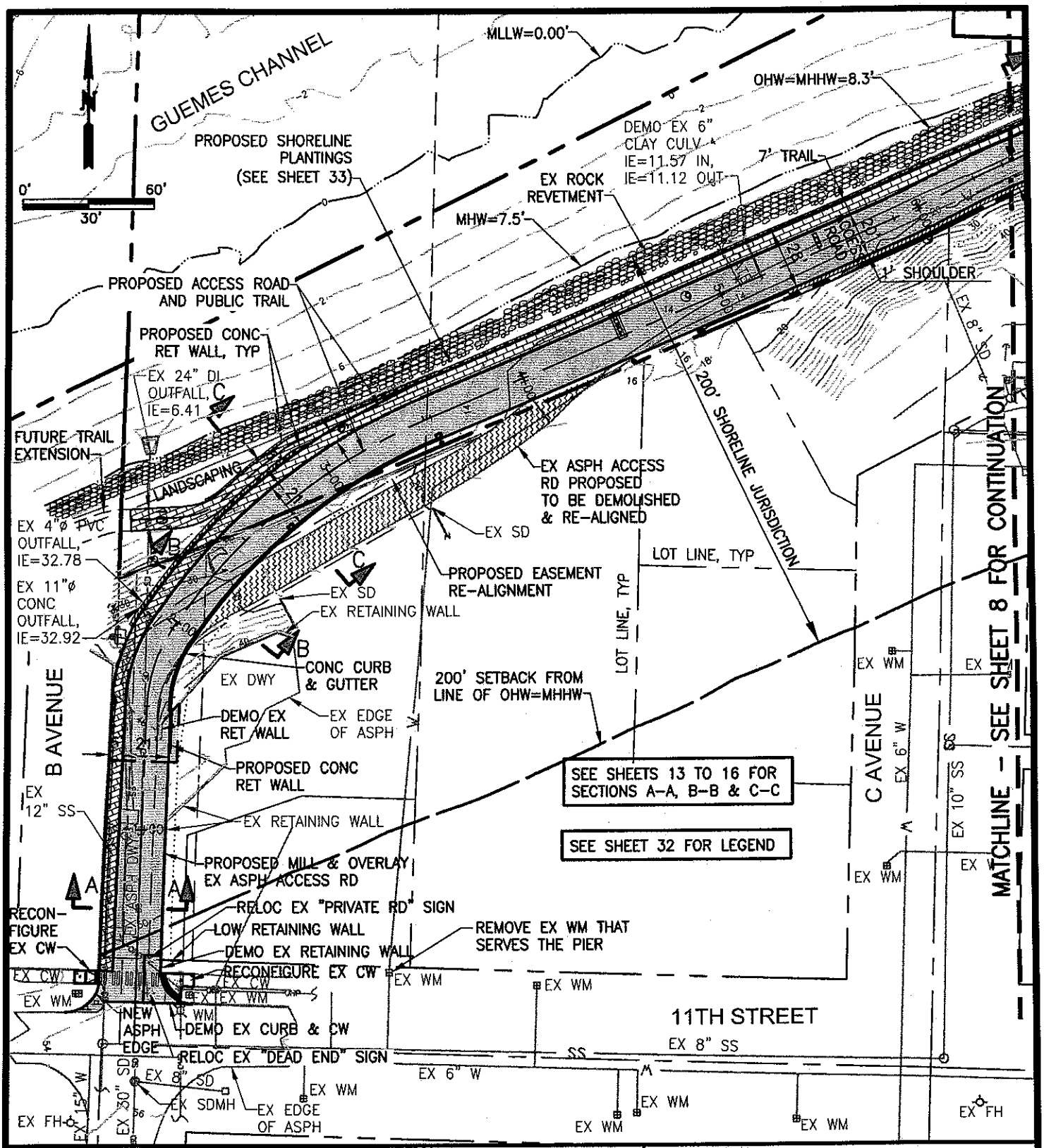

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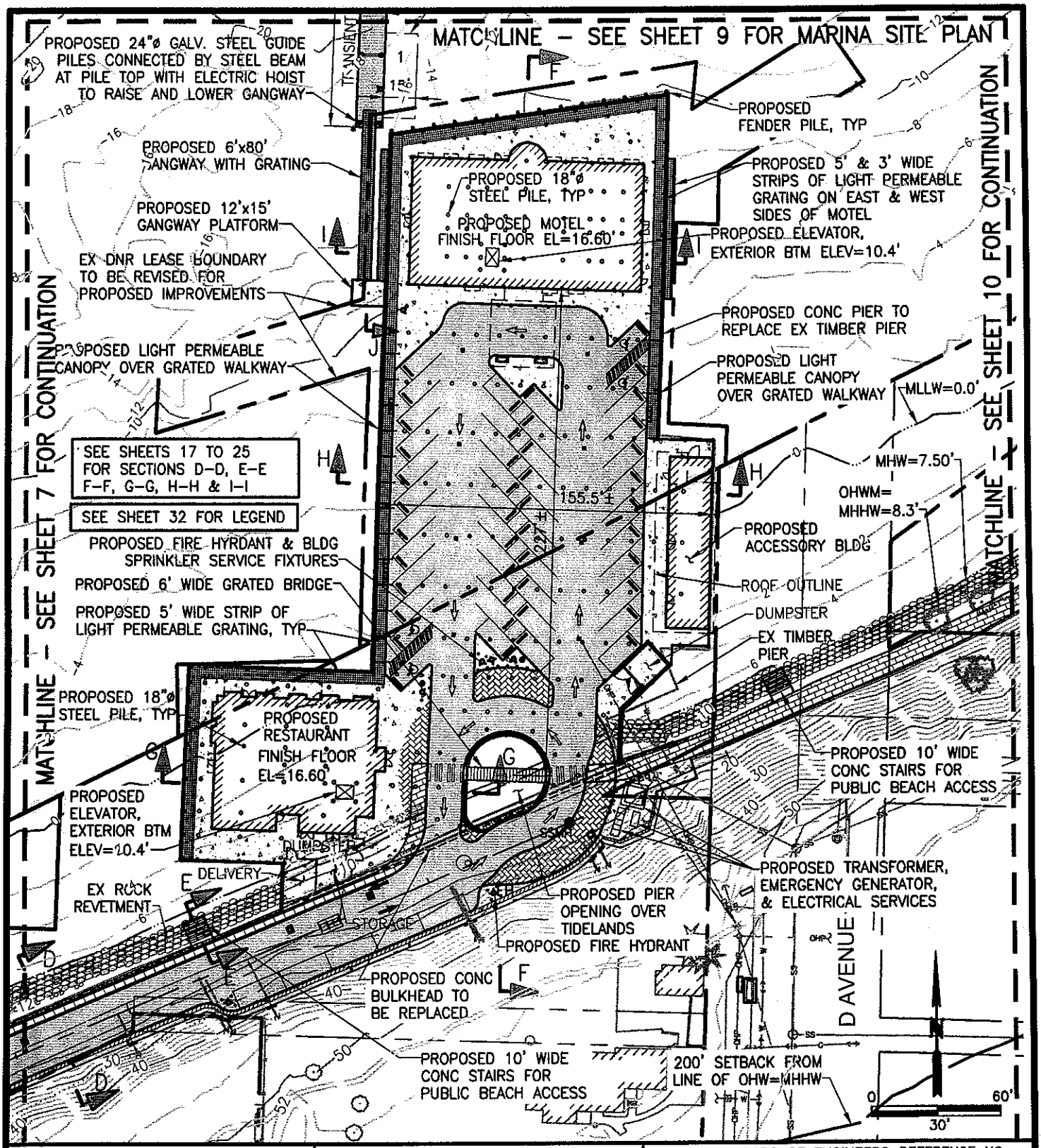

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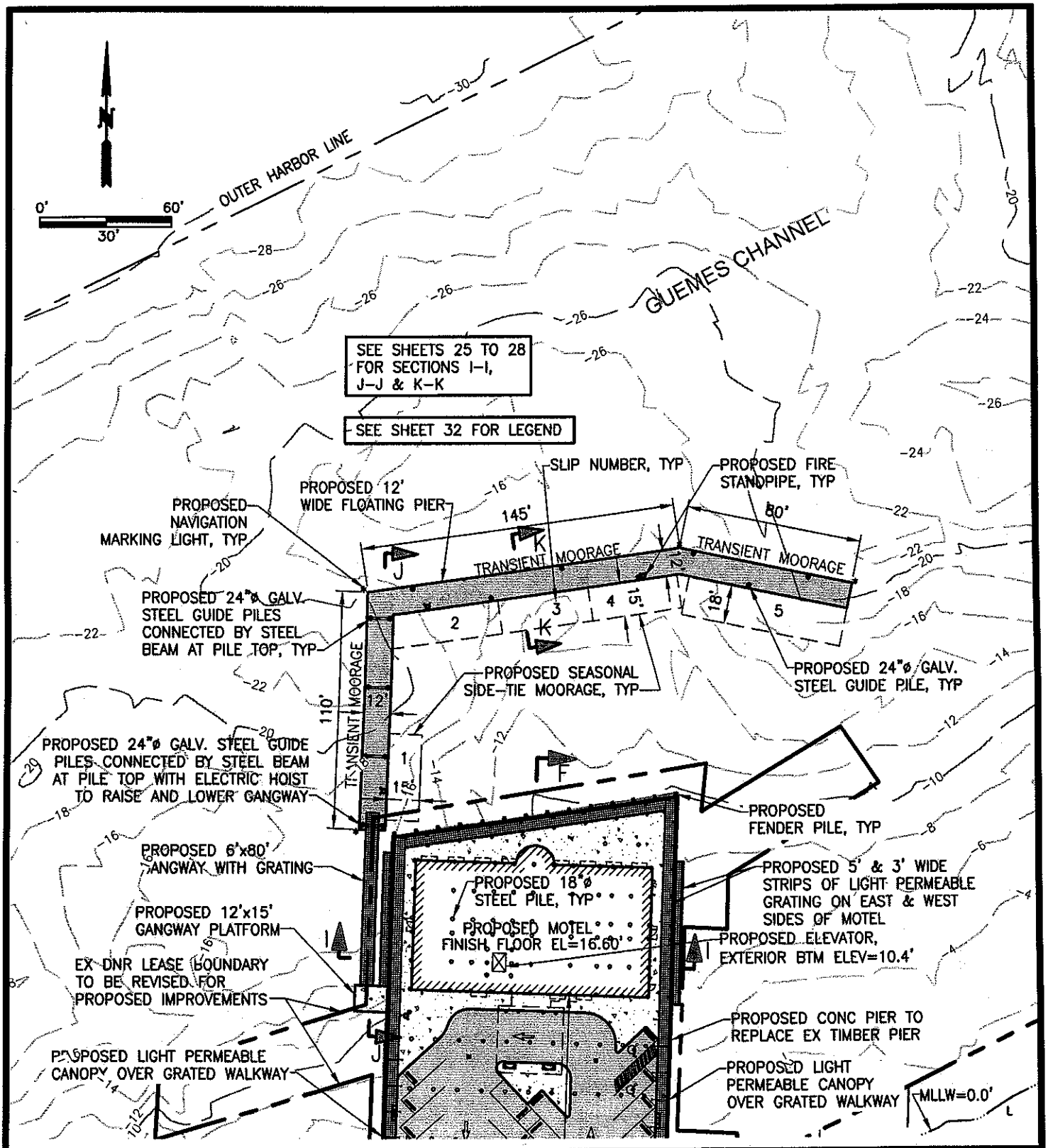

APPLICANT: GEMS LLC
2326 11TH STREET
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ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

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PROPOSED CONDITION
MARINA SITE PLAN

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 9 of 39

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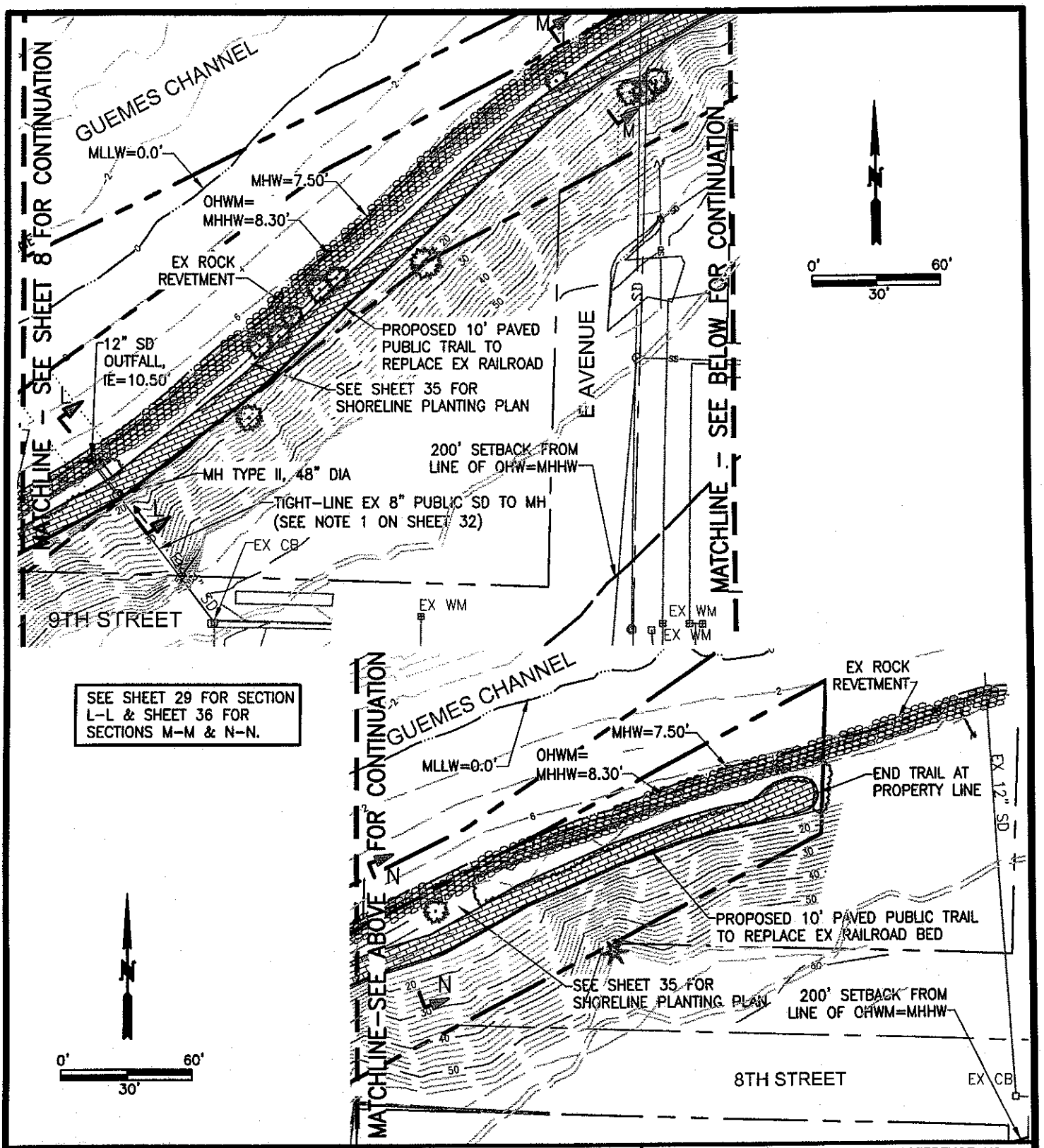

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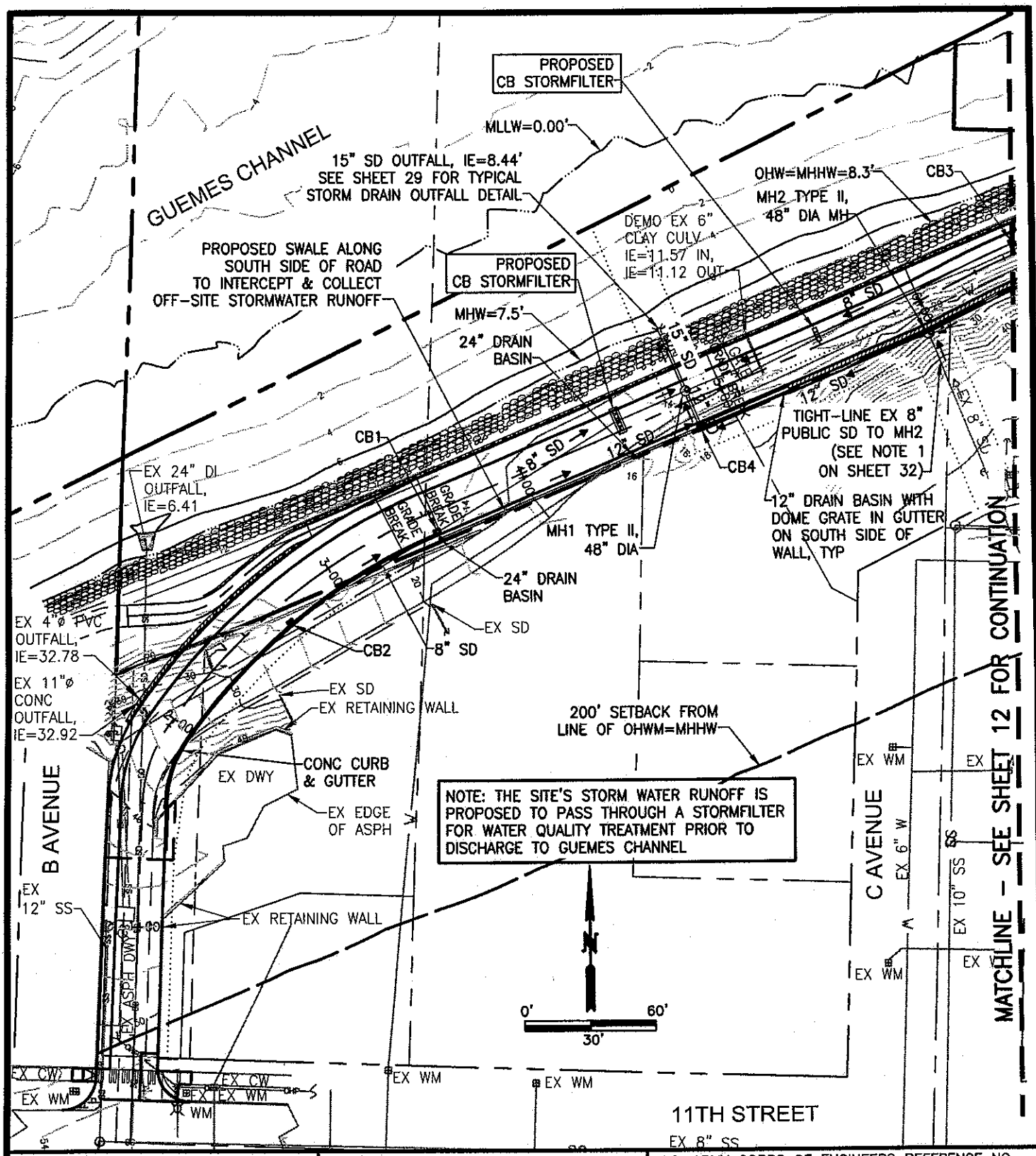

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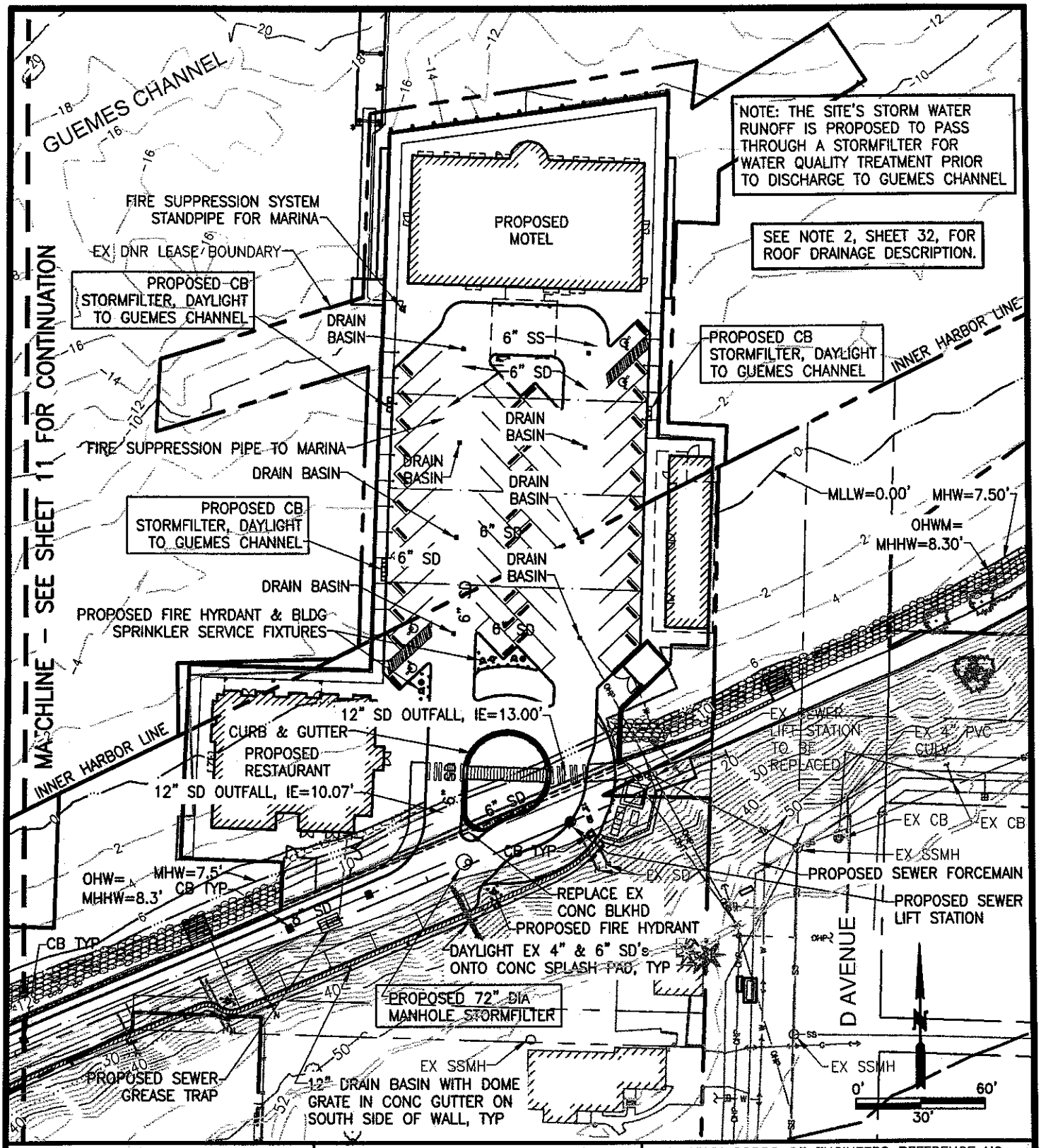

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

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PROPOSED PIER
STORM DRAIN PLAN

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 12 of 39

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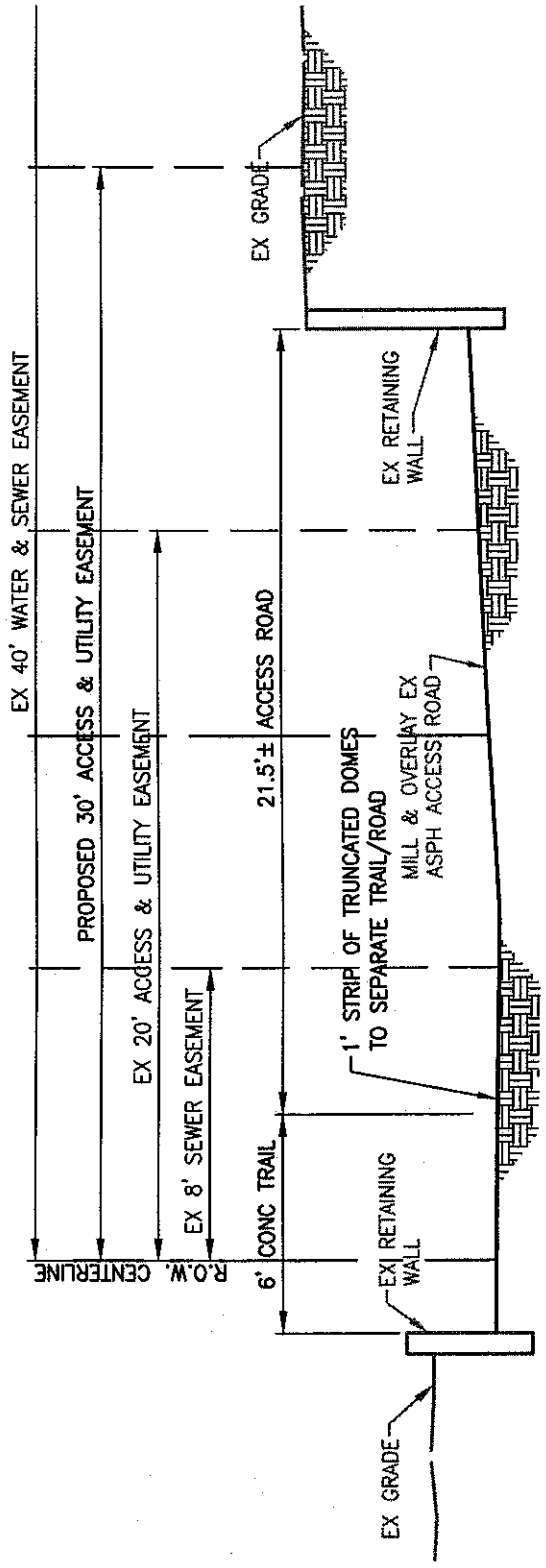
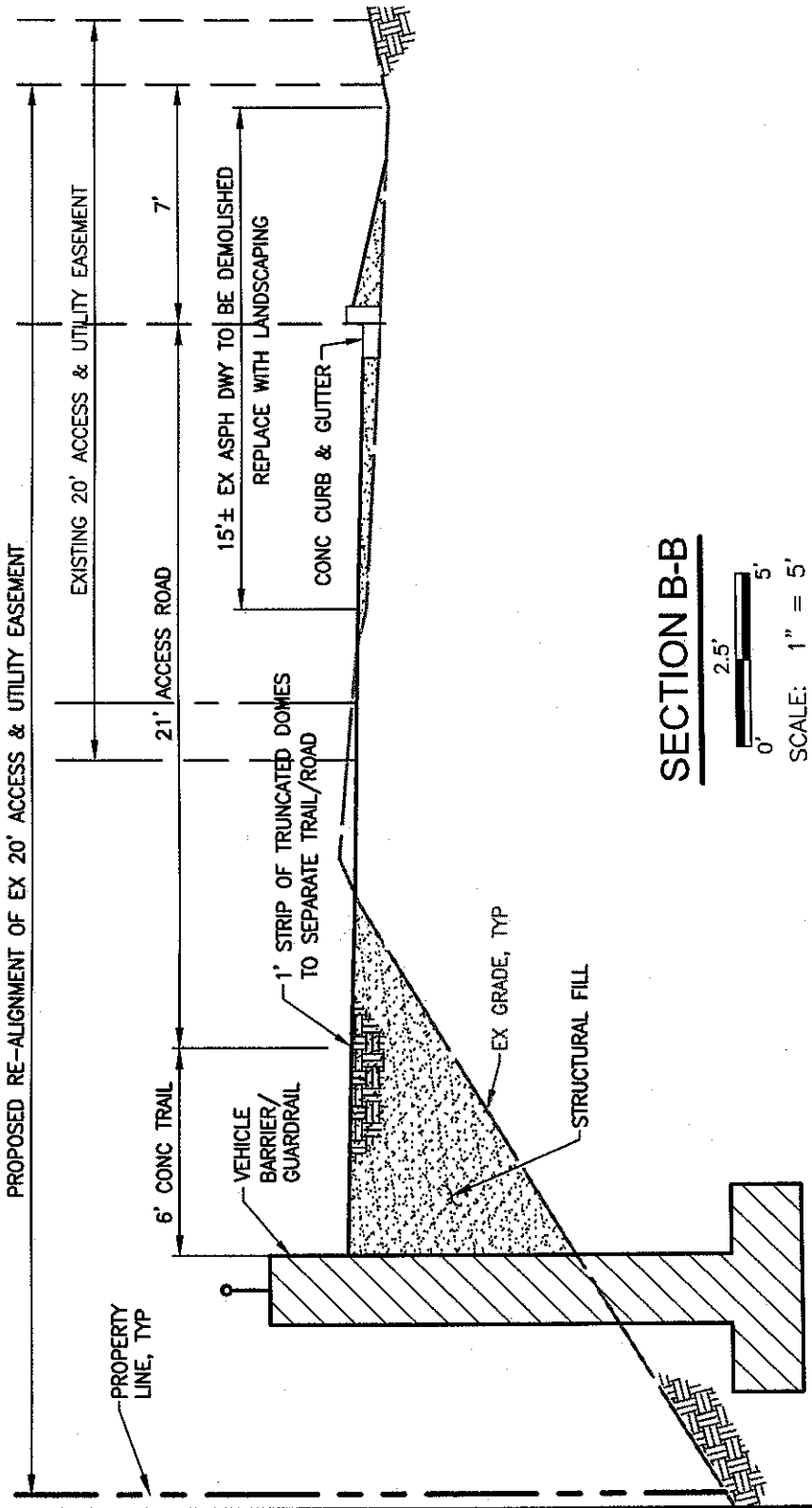


SECTION A-A

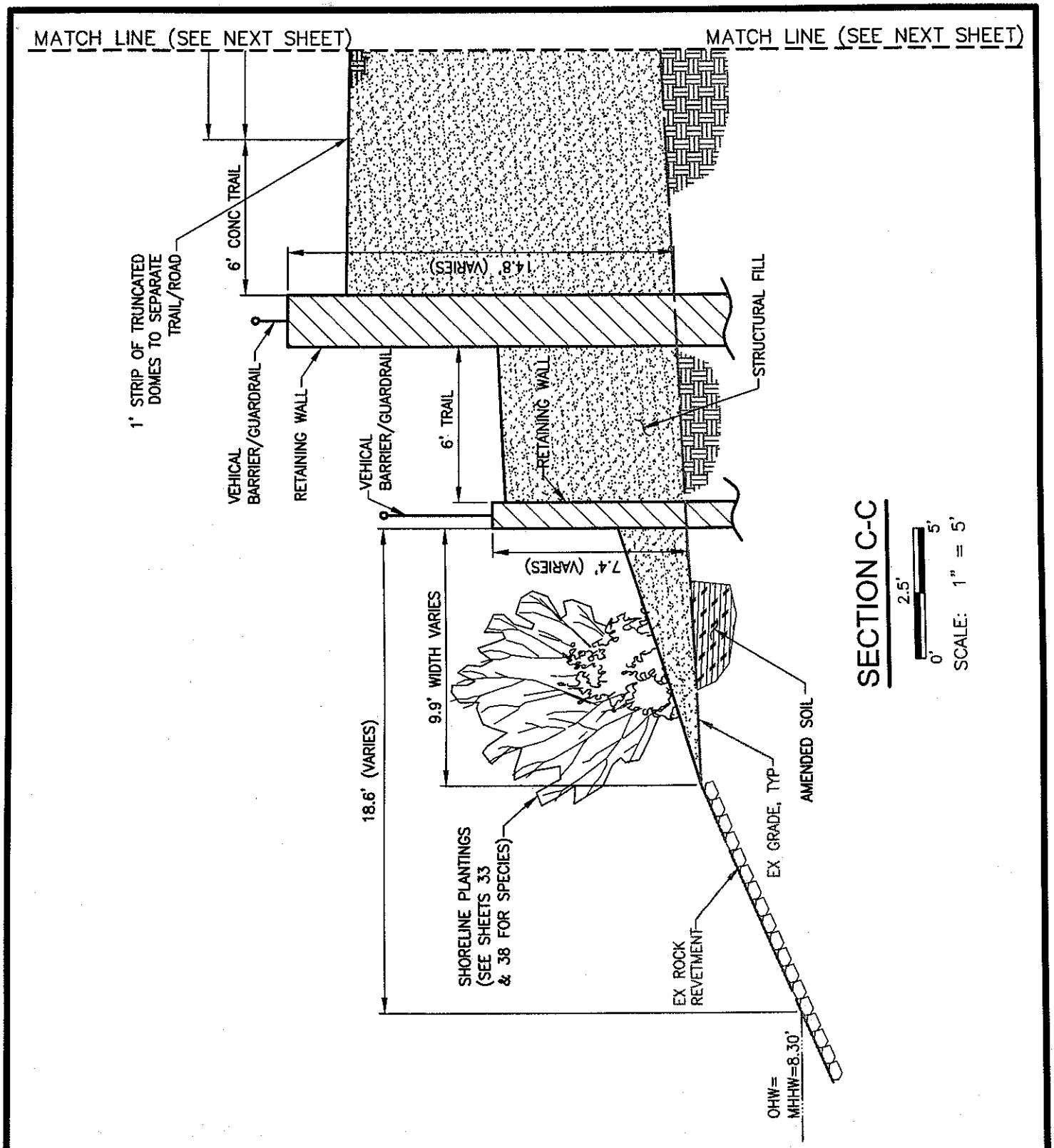
2.5' 0' 5'

SCALE: 1" = 5'

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE ◆ Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735 ◆ Fax: 825-1363	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567'N LONGITUDE: 122.631903'W	SECTION A-A DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 13 of 39



APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE ◆ Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735 ◆ Fax: 825-1363 coastal & civil engineers	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567°N LONGITUDE: 122.631903°W	SECTION B-B DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 14 of 39



APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
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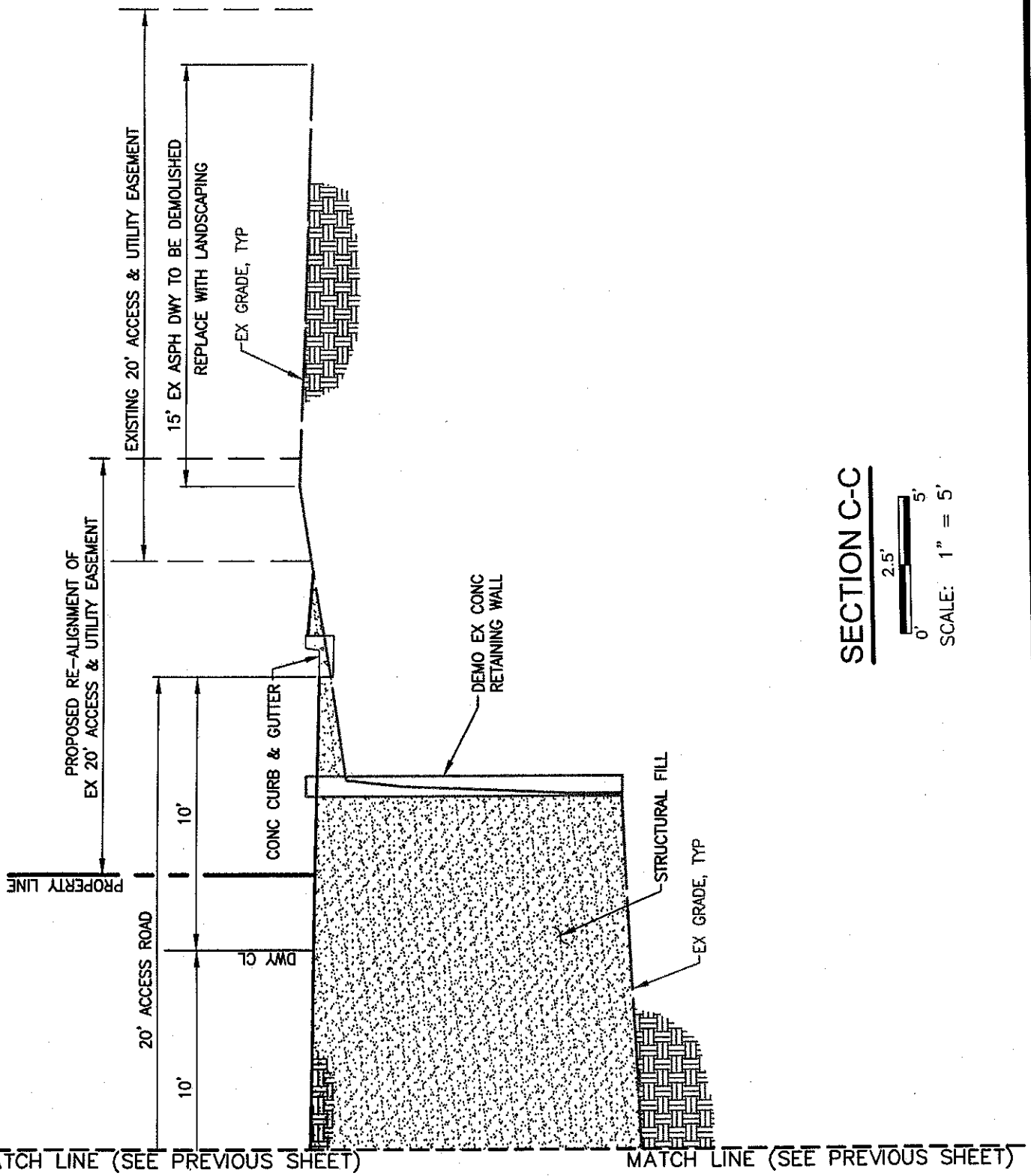

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
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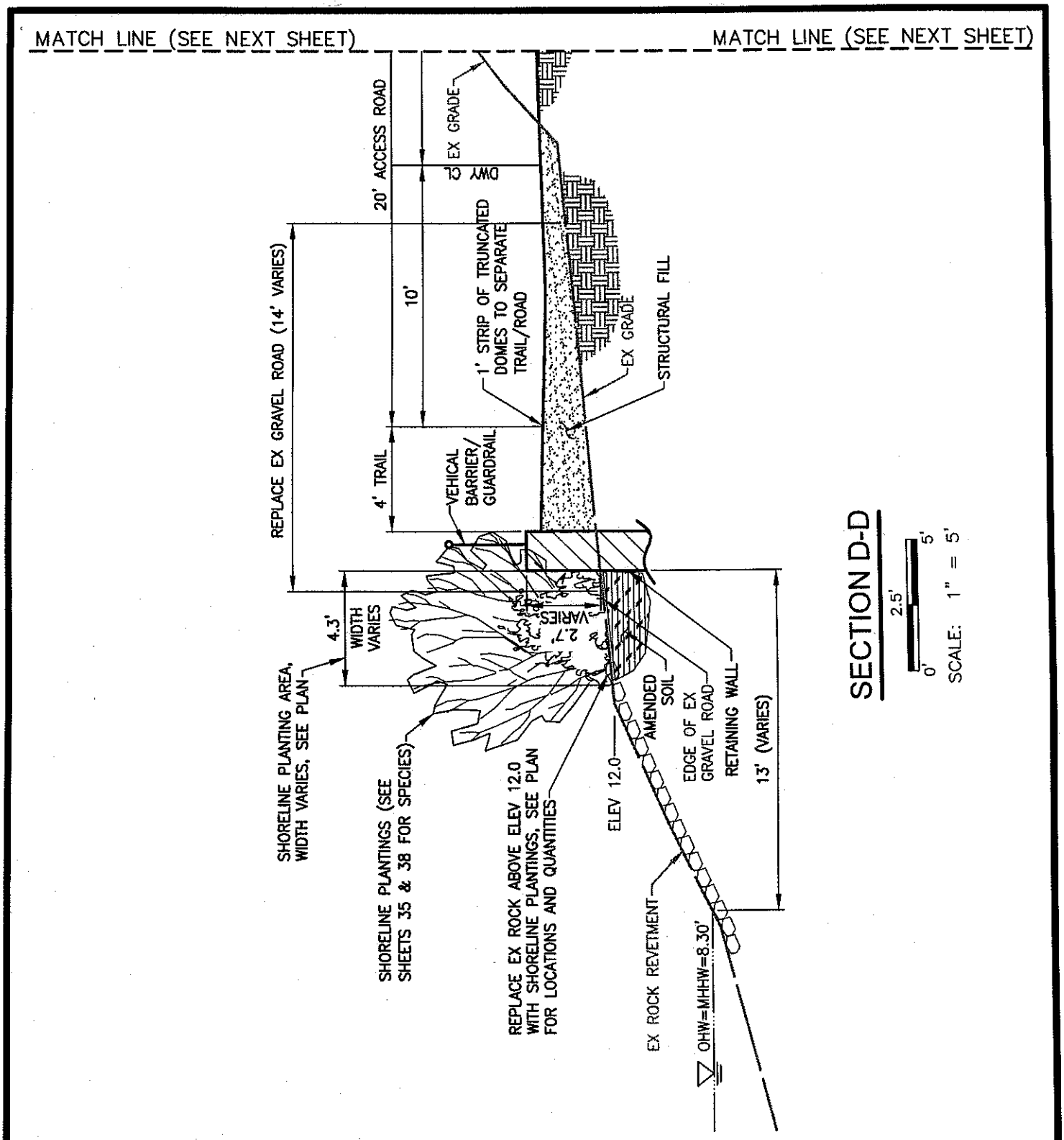

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
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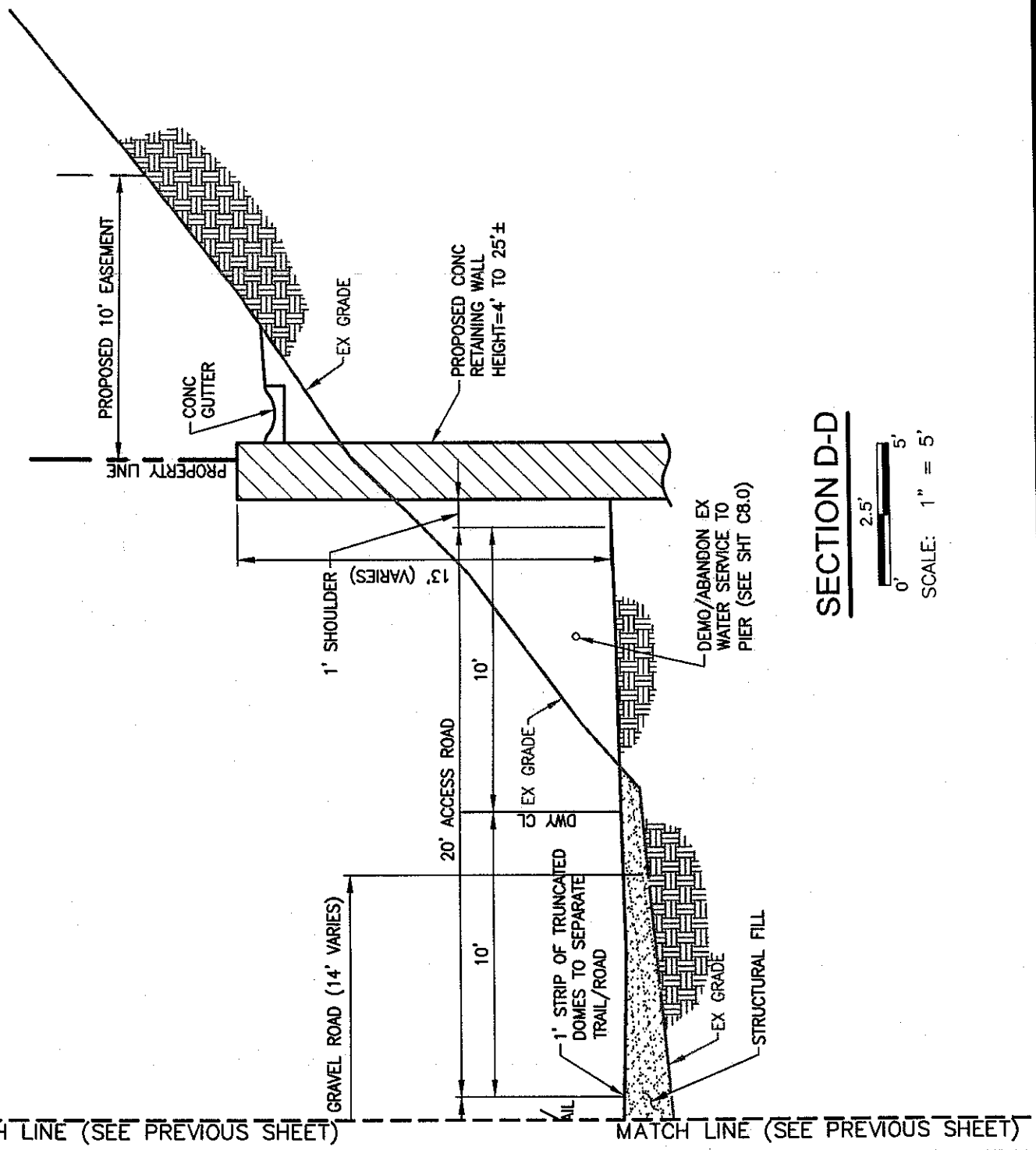


APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

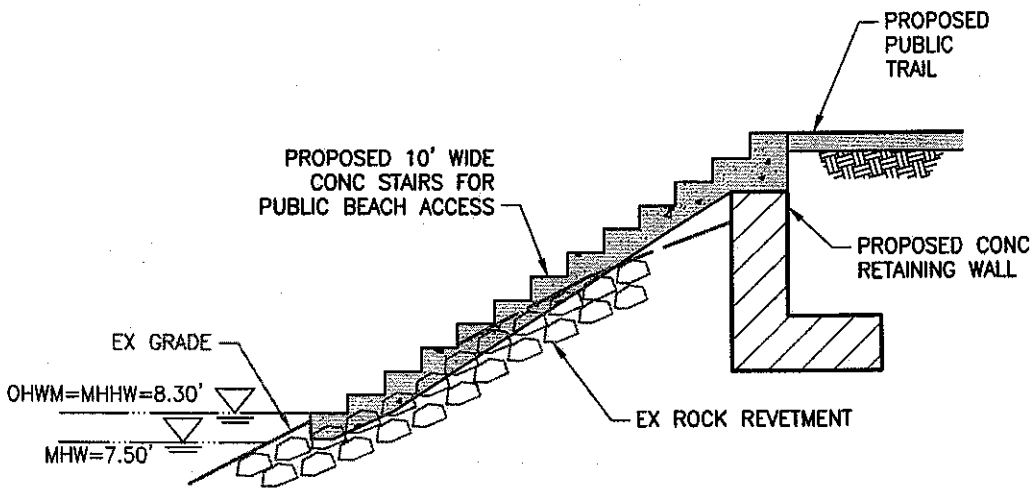
U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567°N LONGITUDE: 122.631903°W

SECTION D-D
(2 OF 2)

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 18 of 39

Layton & Sell
coastal & civil engineers
Layton & Sell, Inc., P.S.
12515 Willows Road NE ◆ Suite 205
Kirkland, Washington 98034-8795
Office: (425)825-1735 ◆ Fax: 825-1363



SECTION E-E: STAIRS FOR PUBLIC BEACH ACCESS

2.5'

0' 5'

SCALE: 1" = 5'

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
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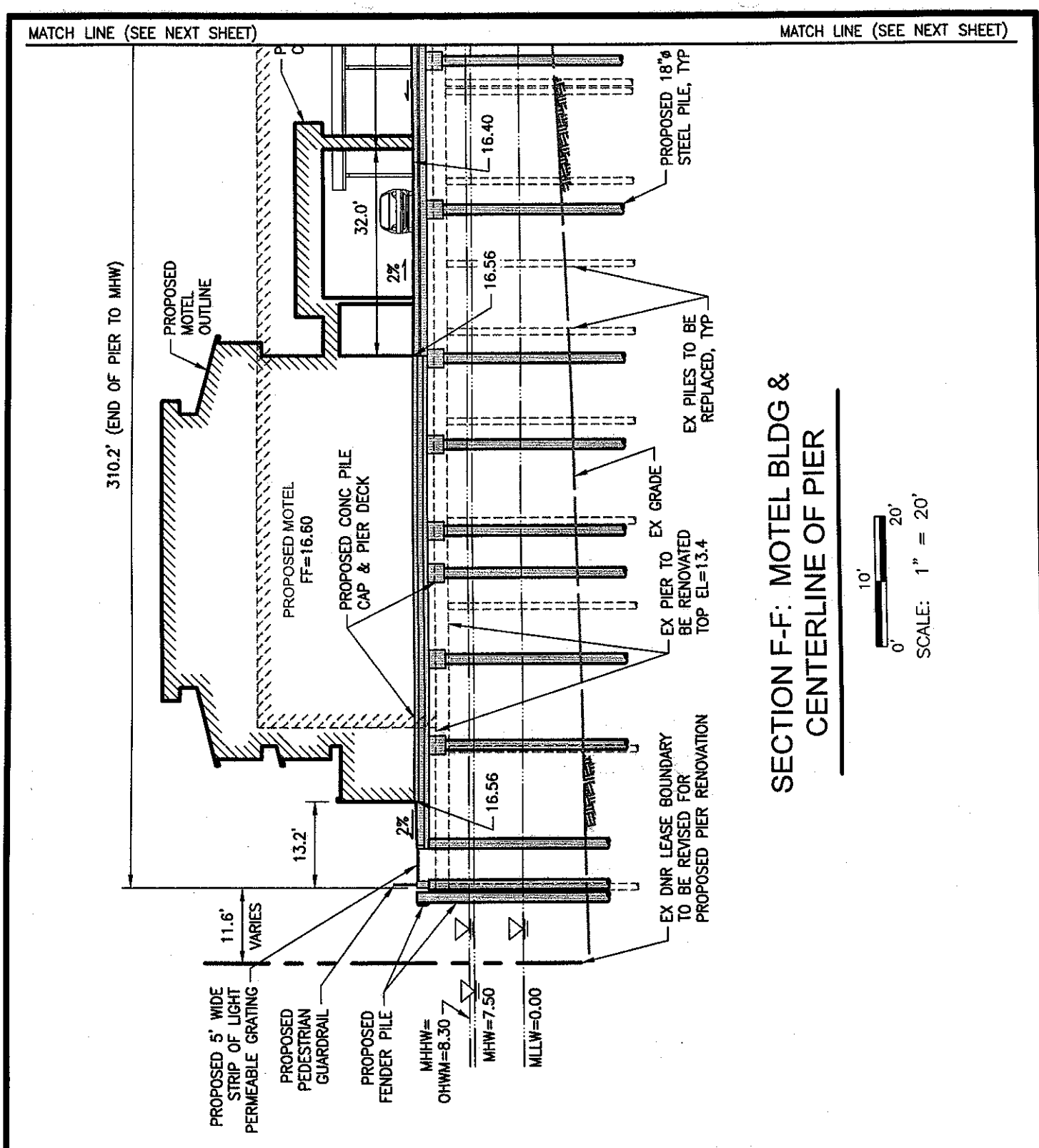
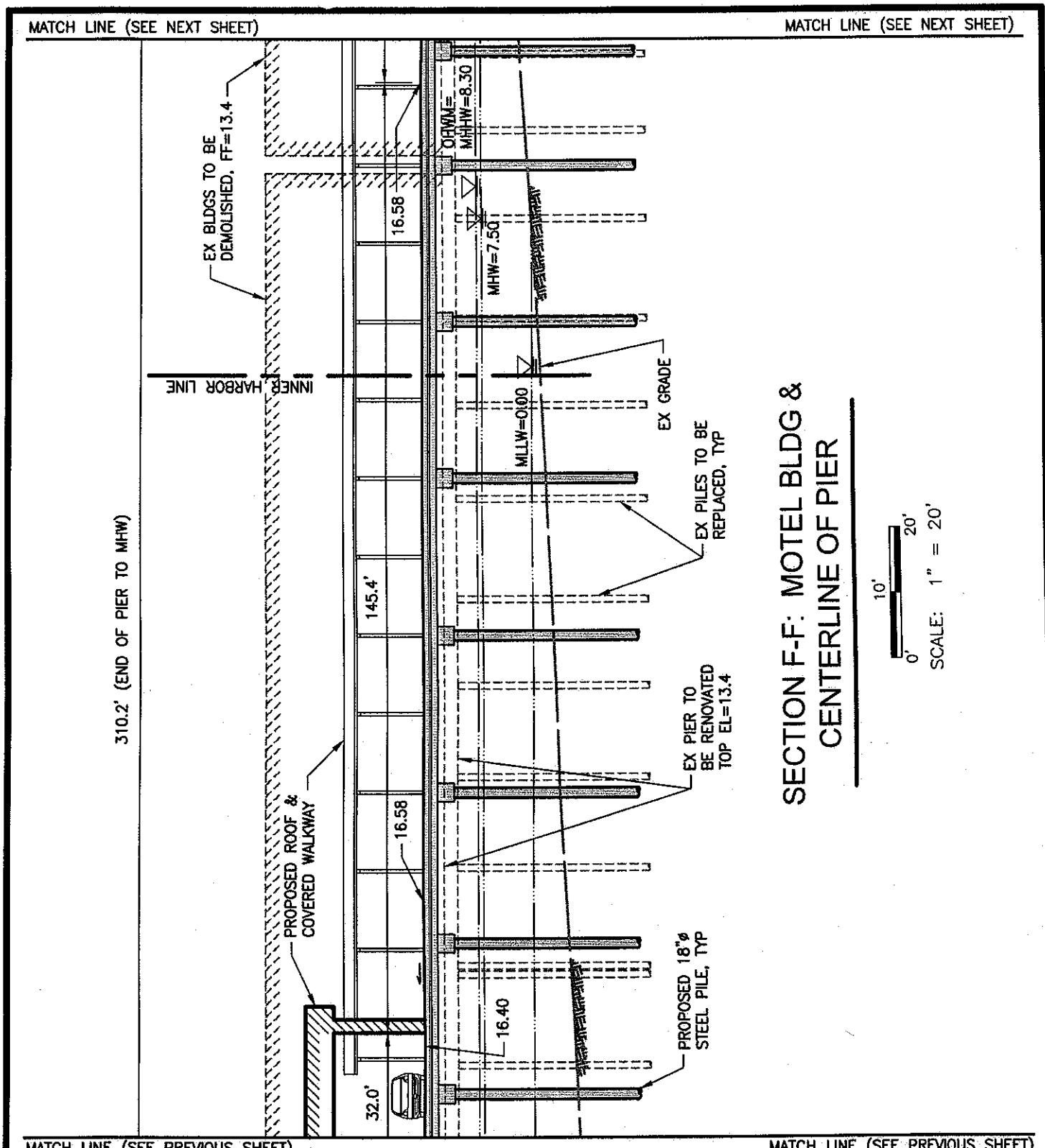


APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE ◆Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735◆ Fax: 825-1363 coastal & civil engineers	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567°N LONGITUDE: 122.631903°W	SECTION F-F (1 OF 3) DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 20 of 39



APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567°N LONGITUDE: 122.631903°W

SECTION F-F
(2 OF 3)

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 21 of 39

Layton & Sell, Inc., P.S.
12515 Willows Road NE ◆ Suite 205
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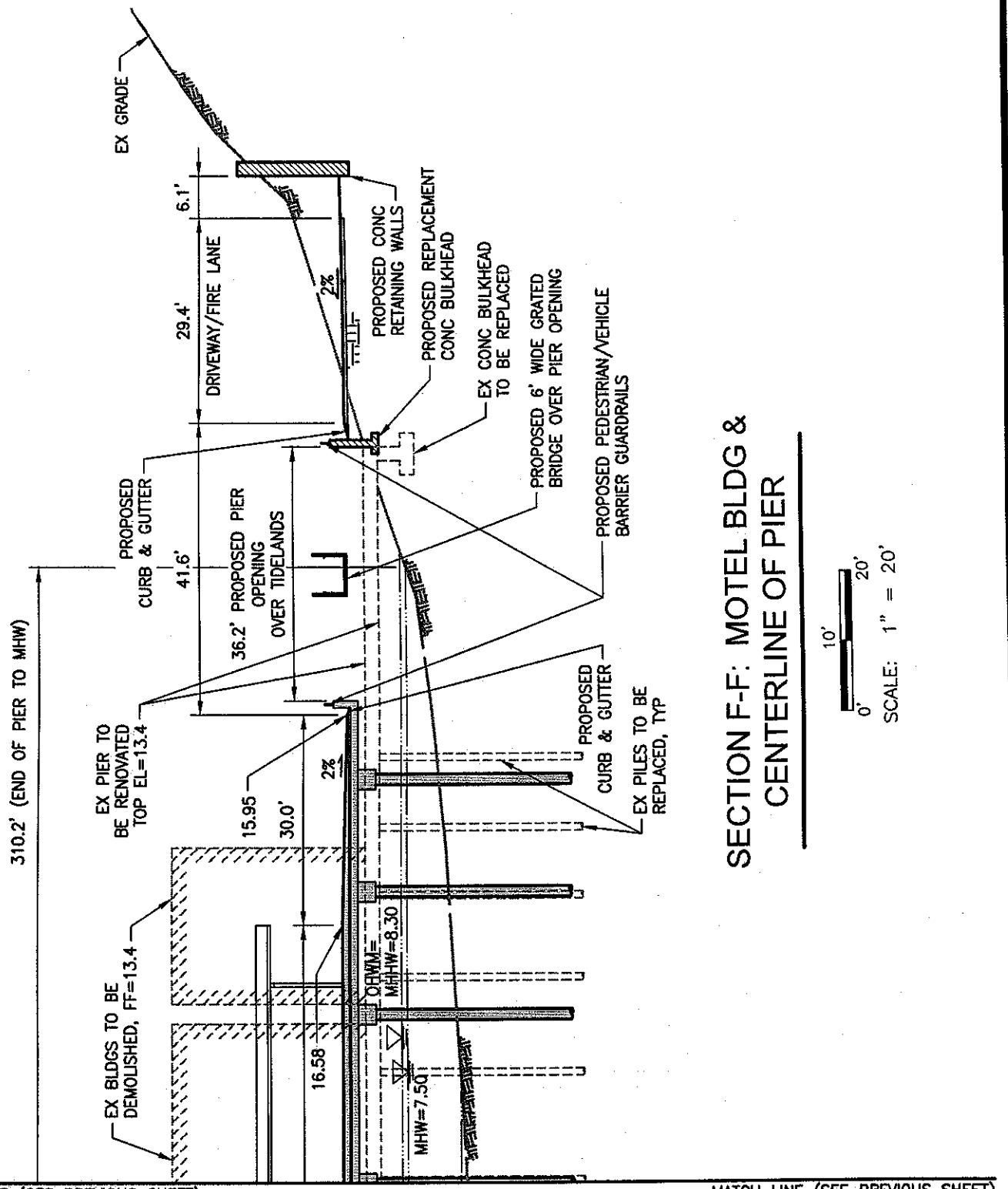
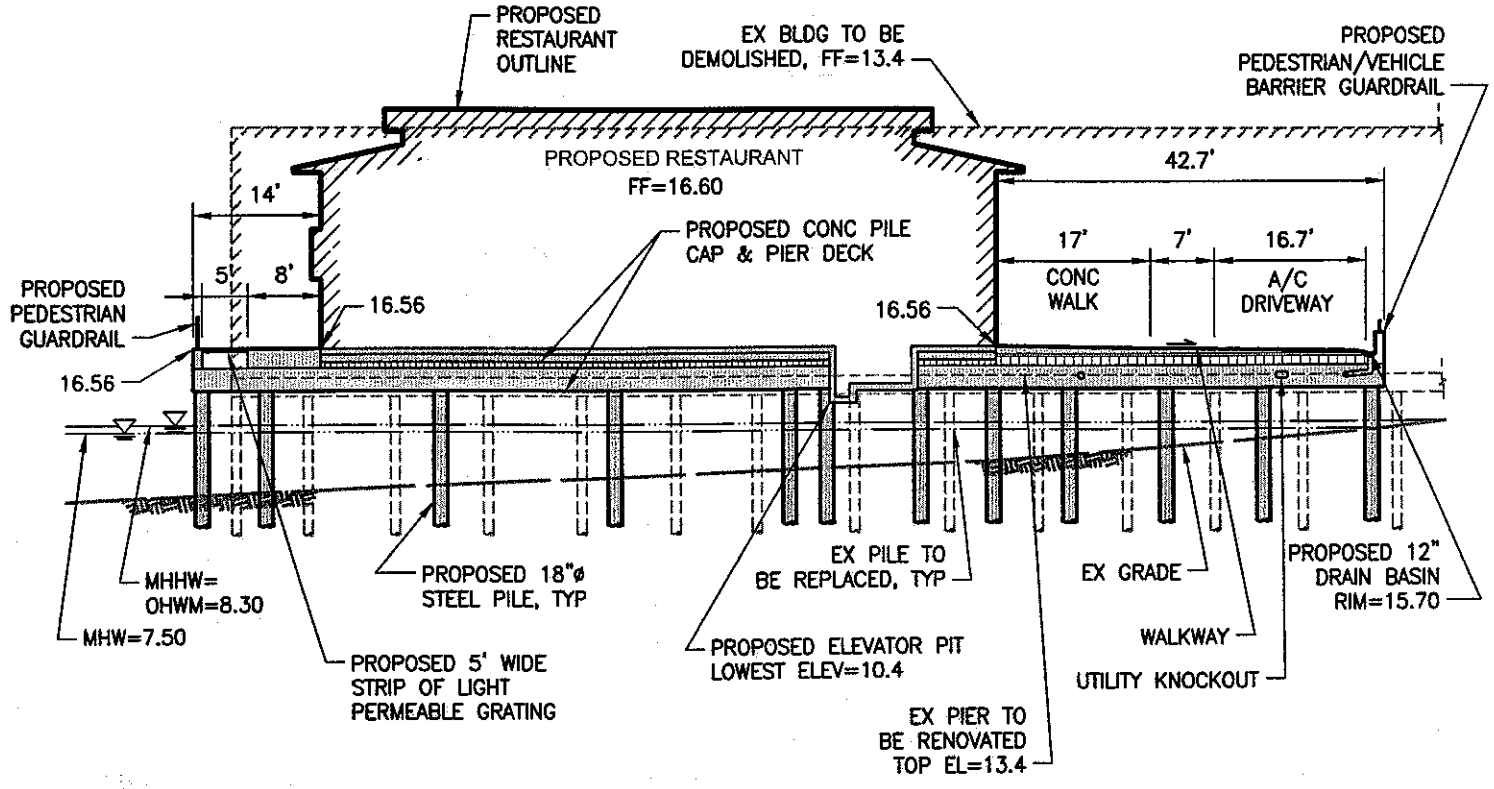


APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE ♦ Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735 ♦ Fax: 825-1363 coastal & civil engineers	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567'N LONGITUDE: 122.631903'W	SECTION F-F (3 OF 3) DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 22 of 39



SECTION G-G: RESTAURANT & DRIVEWAY

10'
0' 20'

SCALE: 1" = 20'

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

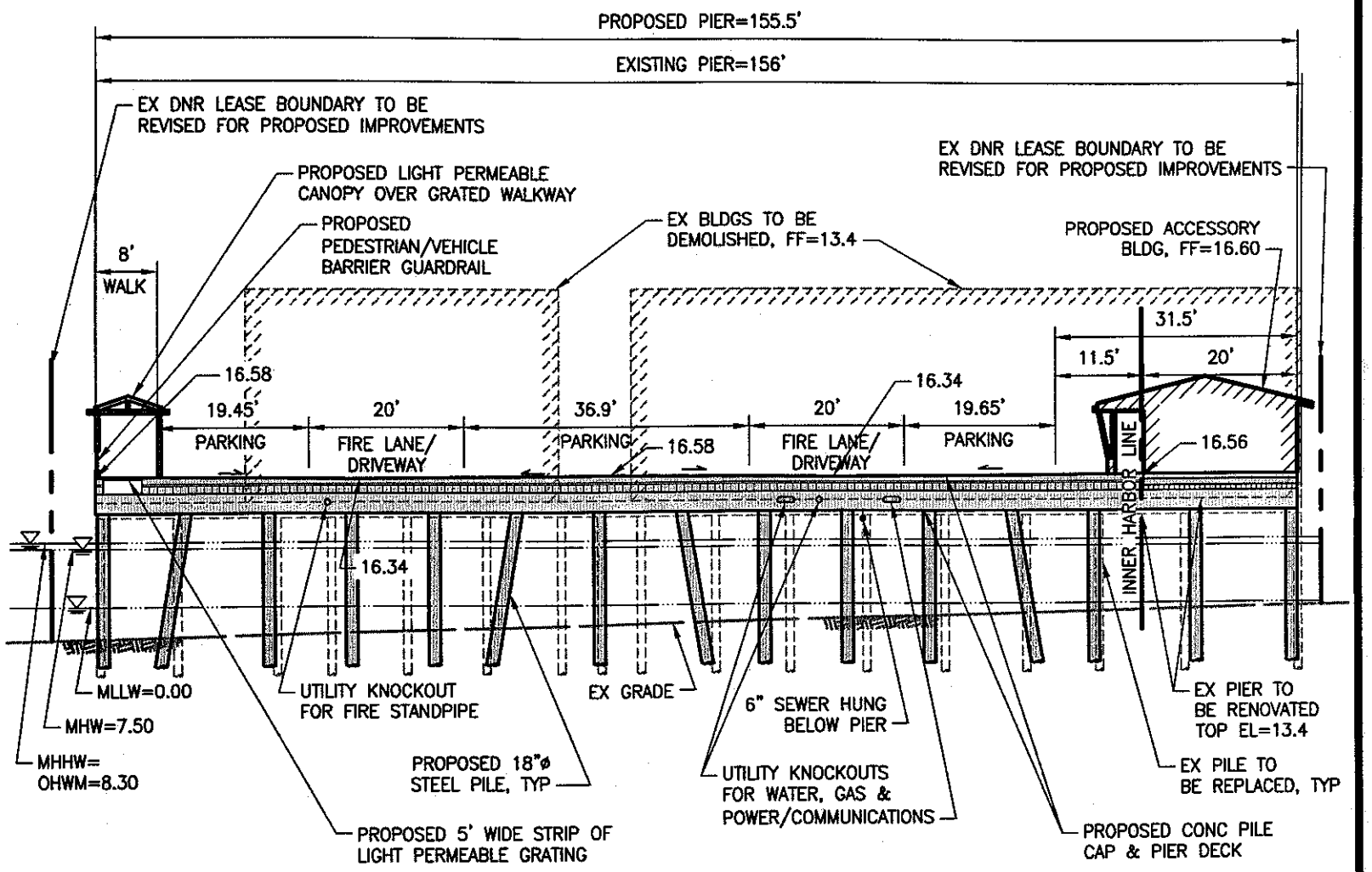
IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567°N LONGITUDE: 122.631903°W

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

SECTION G-G

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 23 of 39

Layton & Sell
coastal & civil engineers
Layton & Sell, Inc., P.S.
12515 Willows Road NE ◆ Suite 205
Kirkland, Washington 98034-8795
Office: (425)825-1735 ◆ Fax: 825-1363



SECTION H-H: PARKING & ACCESSORY BLDG

10'
0' 20'
SCALE: 1" = 20'

Layton & Sell
coastal & civil engineers

Layton & Sell, Inc., P.S.
12515 Willows Road NE ♦ Suite 205
Kirkland, Washington 98034-8795
Office: (425)825-1735 ♦ Fax: 825-1363

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

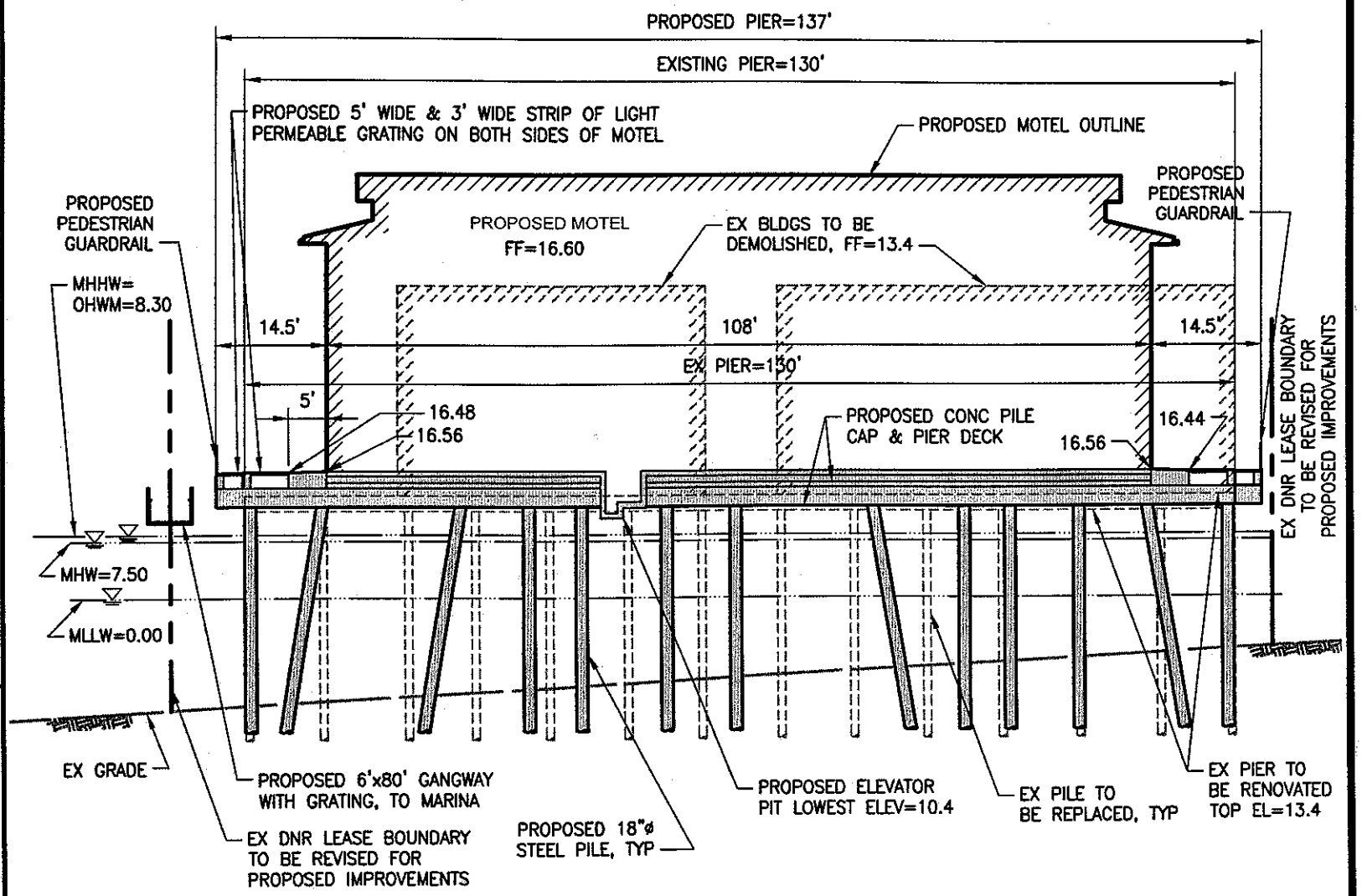
PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567°N LONGITUDE: 122.631903°W

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

SECTION H-H

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 24 of 39



SECTION I-I: MOTEL BLDG

10' 0' 20'

SCALE: 1" = 20'

Layton & Sell, Inc., P.S.
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coastal & civil engineers

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

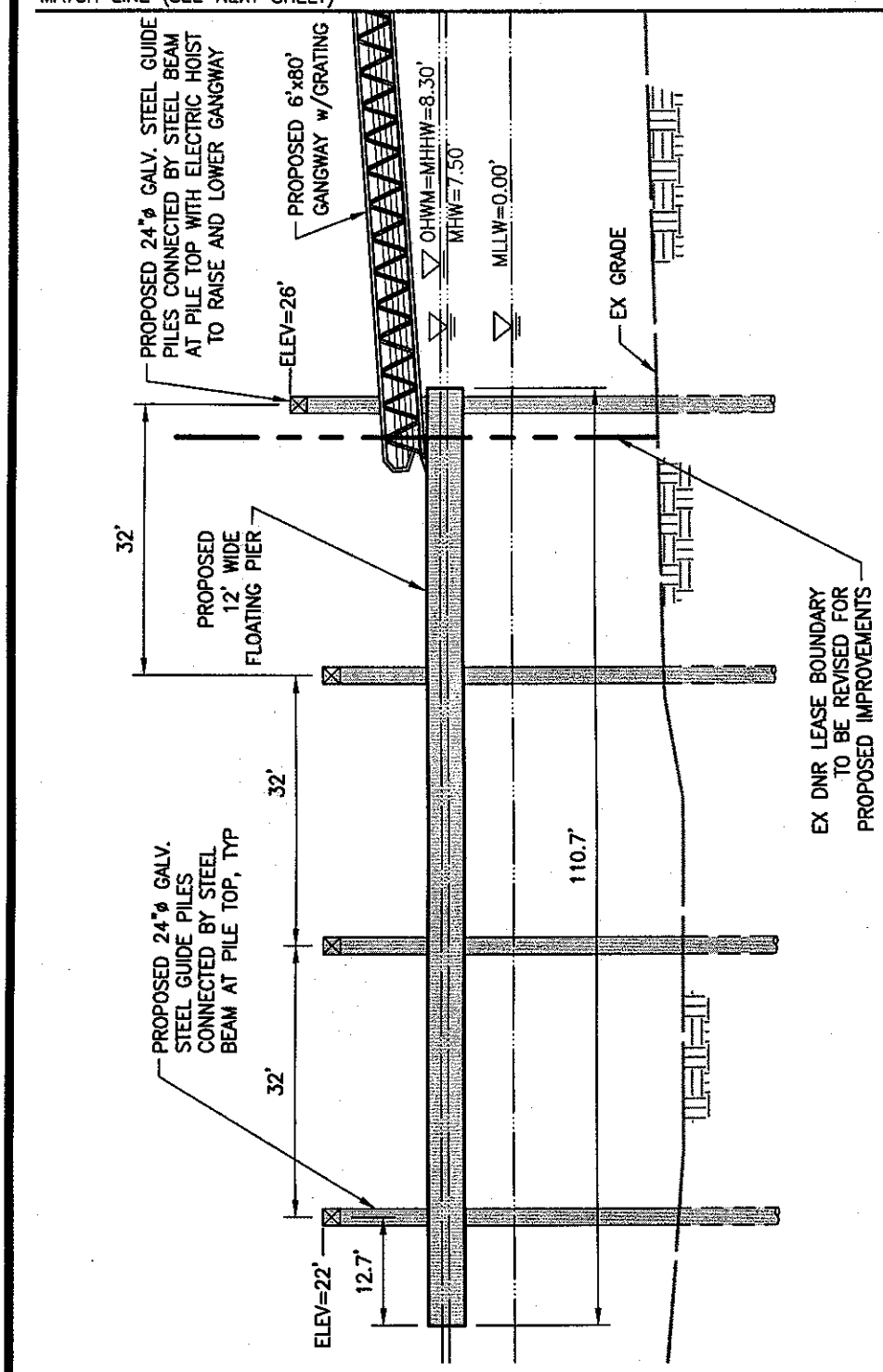
PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 6190049-09-01
LATITUDE: 48.515677N LONGITUDE: 122.631903'W

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

SECTION I-I

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 25 of 39

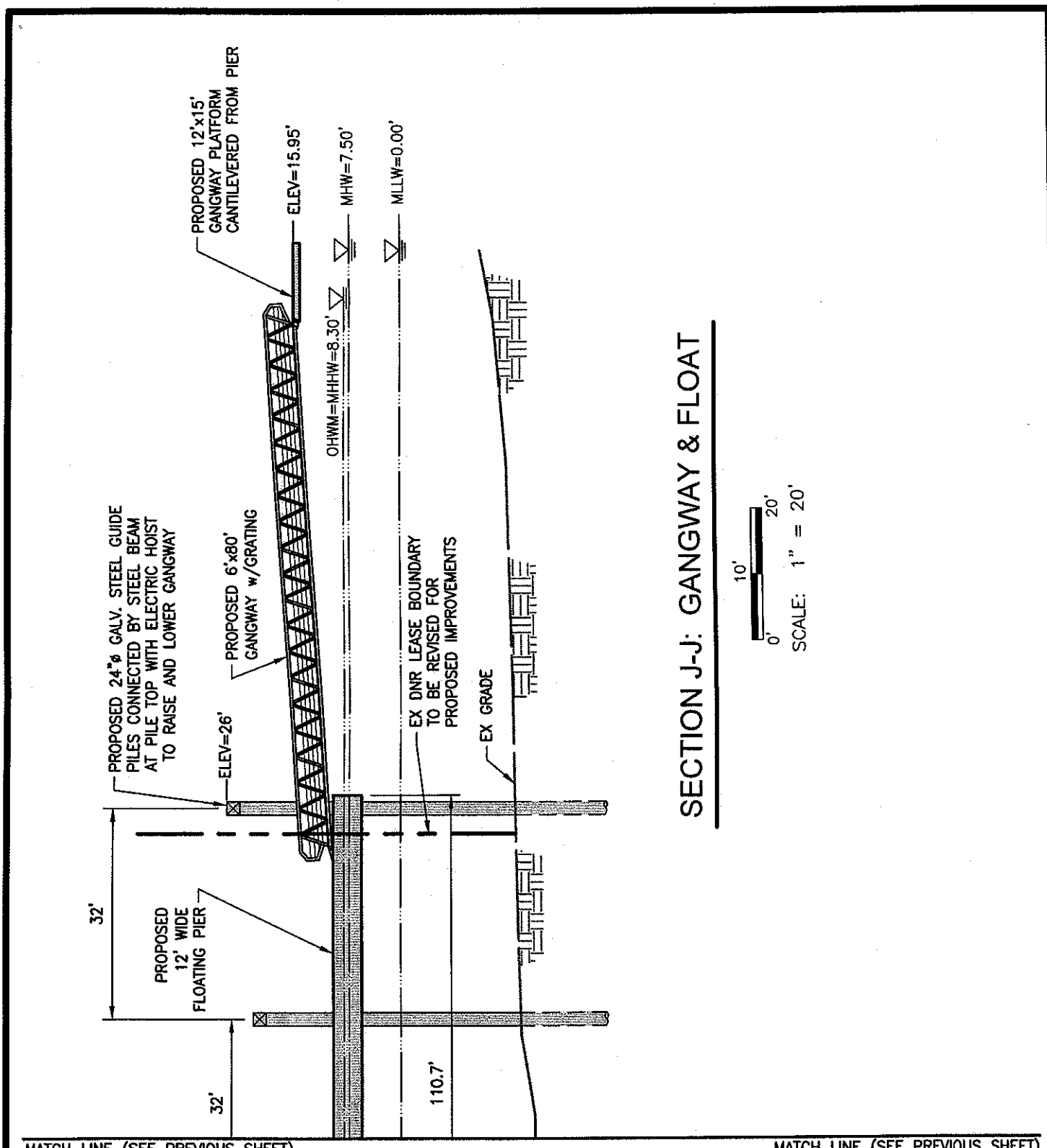


SECTION J-J: GANGWAY & FLOAT

10' 0' 20'

SCALE: 1" = 20'

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE • Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735 • Fax: 825-1363 coastal & civil engineers	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567°N LONGITUDE: 122.631903°W	SECTION J-J (1 OF 2) DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 26 of 39



SECTION J-J: GANGWAY & FLOAT

SCALE: 1" = 20'

0' 10' 20'

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
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IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567'N LONGITUDE: 122.631903'W

SECTION J-J
(2 OF 2)

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 27 of 39

Layton & Sell, Inc., P.S.
12515 Willows Road NE ◆Suite 205
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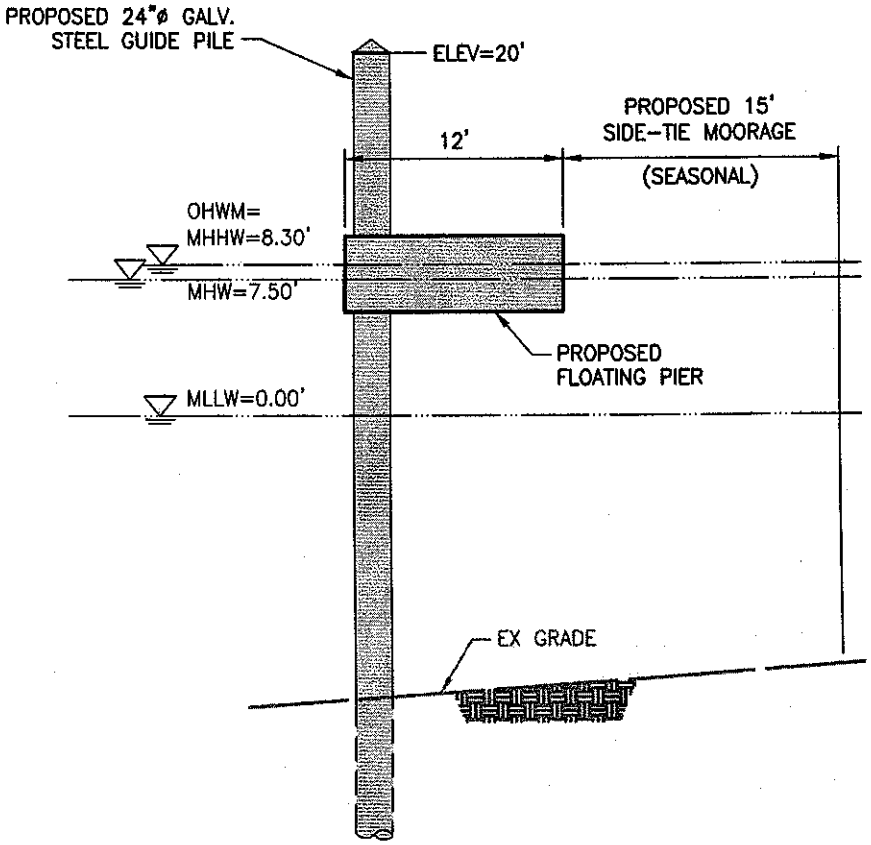

SECTION K-K: FLOAT

5'

0' 10'

SCALE: 1" = 10'

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056	
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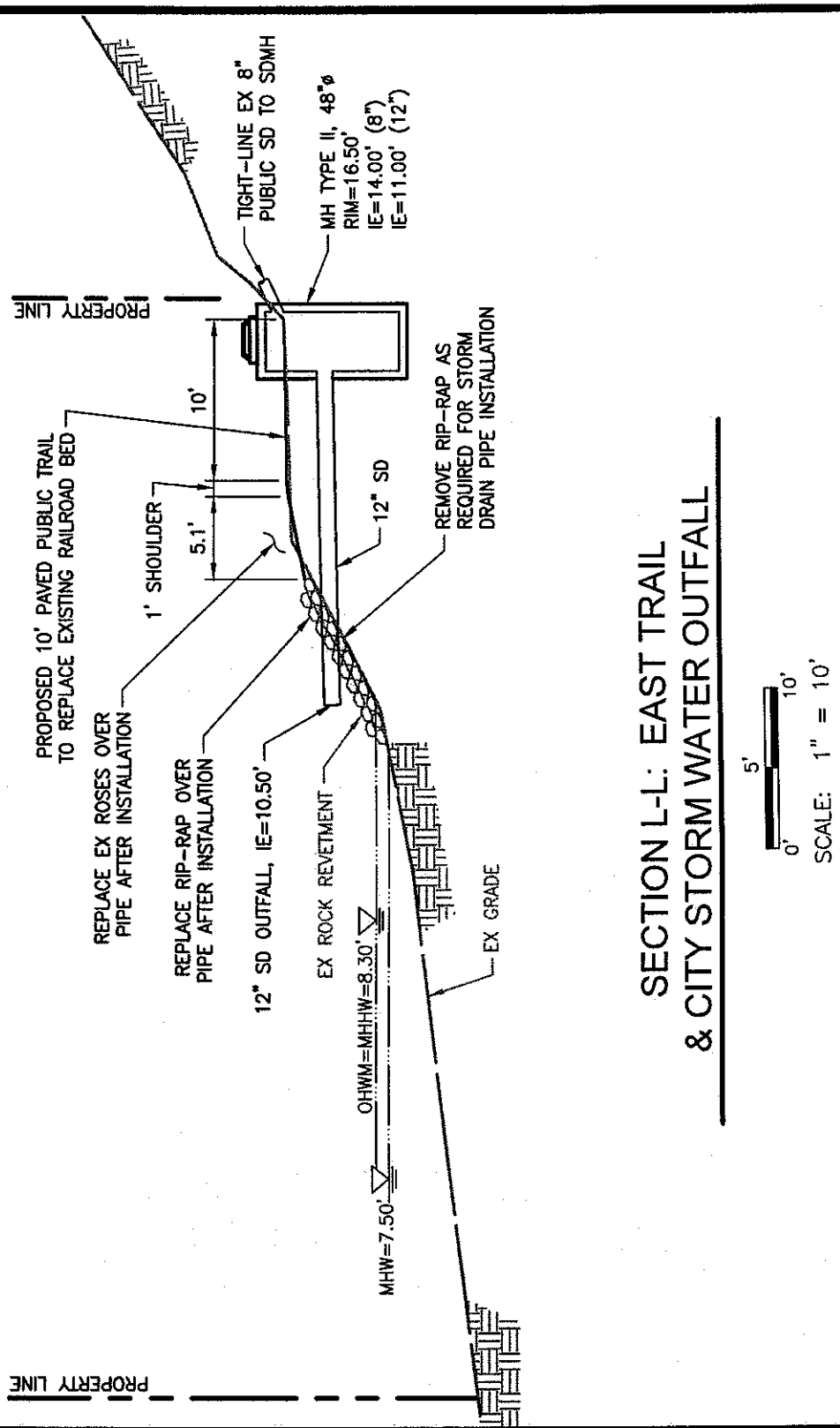
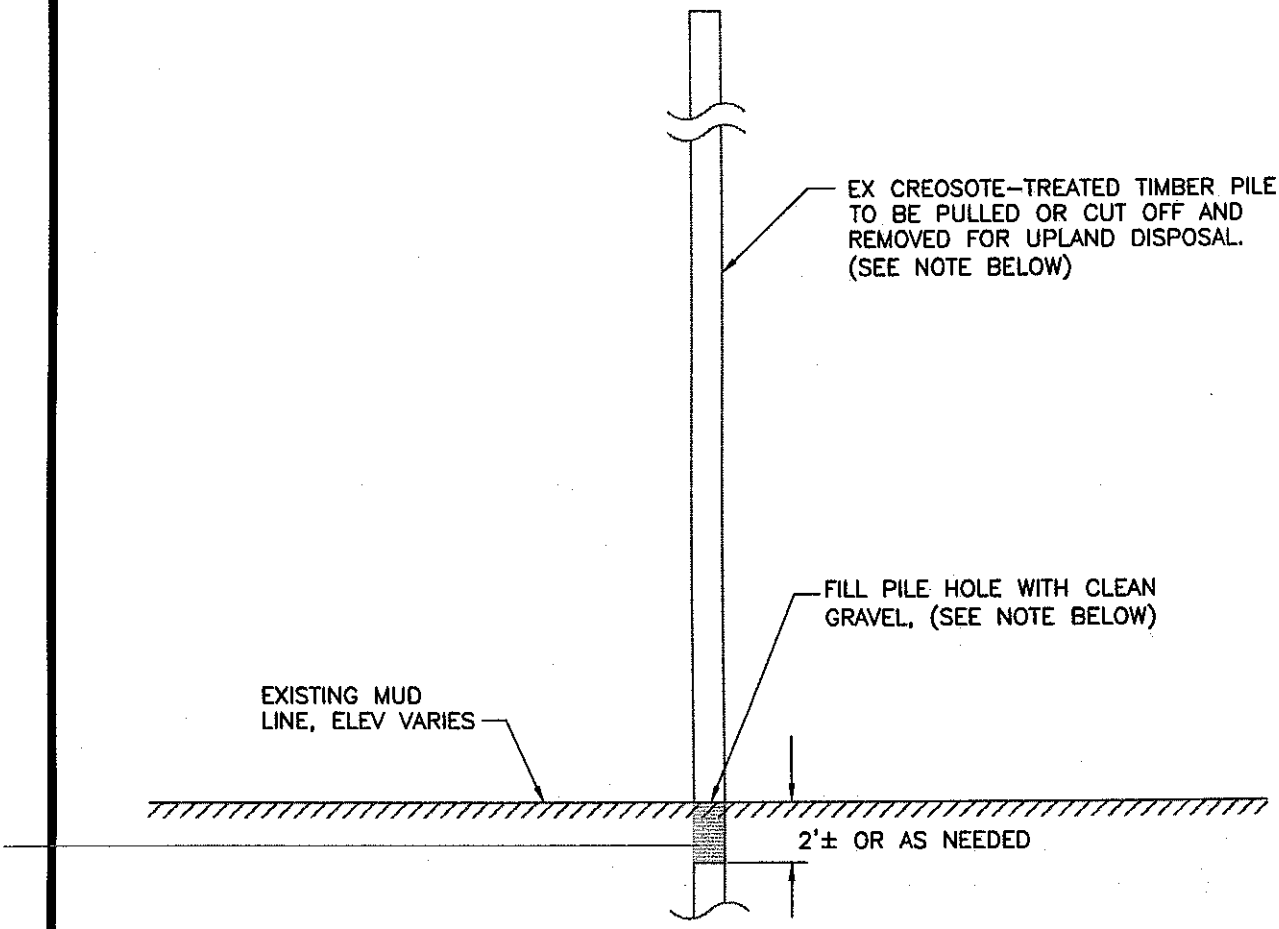


SECTION L-L: EAST TRAIL & CITY STORM WATER OUTFALL

5' 0' 10'

SCALE: 1" = 10'

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
Layton & Sell, Inc., P.S. 12515 Willows Road NE ◆Suite 205 Kirkland, Washington 98034-8795 Office: (425)825-1735◆ Fax: 825-1363	IN: GUEMES CHANNEL AT: ANACORTES COUNTY: SKAGIT STATE: WASHINGTON DATUM: MLLW = 0.00' UPI NUMBER: 619049-09-01 LATITUDE: 48.51567'N LONGITUDE: 122.631903'W	SECTION L-L DATE: 08/14/2009 REVISION DATE: 12/02/2009 SHEET: 29 of 39



TYPICAL PILE REMOVAL DETAIL

NOT TO SCALE

NOTE: APPROXIMATELY 130 EXISTING TIMBER PILES WILL BE FULLY EXTRACTED BY DIRECT PULLING WITH A CRANE BARGE OR VIBRATORY HAMMER. HYDRAULIC WATER JETTING WILL NOT BE ALLOWED. REMAINING PILE HOLES SHALL BE FILLED WITH CLEAN SAND. APPROXIMATELY 596 EXISTING TIMBER PILES WILL BE CUT 2-FEET BELOW THE MUDLINE AND CAPPED WITH CLEAN SAND OR COVERED WITH A PLASTIC OR STEEL CAP TO INSURE THAT CHEMICALS FROM THE EXISTING PILE DO NOT LEACH INTO THE ADJACENT SEDIMENTS. EXTRACTED PILES WILL BE CUT INTO FOUR (4) FOOT LENGTHS PRIOR TO DISPOSAL.

APPLICANT: GEMS LLC 2326 11TH STREET ANACORTES, WA. 98221 ATTN: FARAH ALLY	PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT	U.S. ARMY CORPS OF ENGINEERS REFERENCE NO: NWS-2009-00056
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QUANTITY TAKE-OFF SUMMARY TABLE:

PILE SUMMARY TABLE:	
DESCRIPTION	PILE QUANTITY
EXISTING PILES:	
creosote treated timber:	462
concrete:	238
steel:	26
TOTAL EXISTING PILES:	726
130 existing piles are proposed to be pulled to avoid conflict with the proposed replacement piles. The remaining 596 piles will be cut below the mudline and will be capped with clean sand.	
PROPOSED PILES:	
pier batter piles:	60 (18" dia steel)
pier vertical piles:	259 (18" dia steel)
pier fender piles:	14 (18" dia steel)
marina guide piles:	15 (24" dia steel)
TOTAL PROPOSED PILES:	348

DREDGE & FILL SUMMARY WATERWARD OF BULKHEAD:

DREDGE: NO DREDGE WORK IS PROPOSED FOR THIS PROJECT

FILL: CLEAN SAND WILL BE USED TO BACKFILL THE HOLES OF THE CUT OR REMOVED PILING. CLEAN SAND VOLUME = 0.1 CUBIC YARDS PER PILE FOR A TOTAL OF 73 CUBIC YARDS FOR THE 726 TOTAL EXISTING PILING.

OVER-WATER COVERAGE SURFACE AREA SUMMARY TABLE:
(SURFACE AREA UNIT = SQUARE FEET)

DESCRIPTION	TOTAL AREA THAT IS WATERWARD OF THE FACE OF BULKHEAD	AREA BELOW MHW=7.50'	AREA ABOVE MHW=7.50' TO THE FACE OF BULKHEAD
EXISTING TIMBER PIER:	54,762	52,563	2,199
PROPOSED REPLACEMENT PIER:			
solid pier area:	48,179	46,165	2,014
light permeable grating:	3,976	3,976	0
grated 6' wide bridge:	216	125	91
TOTAL REPLACEMENT PIER AREA:	52,371	50,266	2,105
PROPOSED MARINA:			
floating pier area:	3,874	3,874	0
grated gangway area:	432	432	0
gangway platform:	180	180	0
TOTAL MARINA AREA:	4,486	4,486	0

TOTAL EXISTING OVER-WATER COVERAGE = 54,762 SF (EXISTING PIER HAS NO GRATING)

TOTAL PROPOSED OVER-WATER COVERAGE =
52,233 SF (solid) plus 4,624 SF (grating with a 60% open area) = 56,857 SF

NET CHANGE IN OVER-WATER COVERAGE EQUALS A NET REDUCTION OF 679 SF
[proposed = 56,857 - (4,624x0.60) = 54,083] minus [54,762 existing] = 679 sf reduction

APPLICANT: GEMS LLC
2326 11TH STREET
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ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
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LATITUDE: 48.51567°N LONGITUDE: 122.631903°W

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

QUANTITY TAKE-OFF SUMMARY TABLE

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 31 of 39

Layton & Sell
coastal & civil engineers
Layton & Sell, Inc., P.S.
12515 Willows Road NE ◆Suite 205
Kirkland, Washington 98034-8795
Office: (425)825-1735◆ Fax: 825-1363

LEGEND:


EXISTING DILAPIDATED TIMBER PIER PROPOSED FOR DEMOLITION & RENOVATION (SEE SHEETS 2 & 5).


EXISTING CONCRETE SURFACE PROPOSED FOR DEMOLITION & RENOVATION (SEE SHEET 2).


EXISTING GRAVEL ACCESS ROAD PROPOSED FOR DEMOLITION & RENOVATION (SEE SHEETS 2, 4 & 5).


EXISTING ASPHALT ACCESS ROAD PROPOSED FOR DEMOLITION & RENOVATION (SEE SHEETS 2, 4 & 5).


DRIVE AISLE FOR MOTEL/RESTAURANT PATRONS. ASPHALT OR CONCRETE BROOM SURFACE.


CONCRETE BROOM SURFACE.


PUBLIC TRAIL: STAMPED ASPHALT OR CONCRETE SURFACE ON WEST SIDE OF PIER; ASPHALT SURFACE ON EAST SIDE OF PIER.


PAVEMENT STAMP PATTERN TO DELINEATE LIMIT OF 50' RADIUS FOR FIRE TRUCK. ASPHALT OR CONCRETE SURFACE.


RETAINING WALL

NOTES:

1. INSPECT EX PIPE SLOPE DRAINS ALONG THEIR ENTIRE LENGTH FOR WATER-TIGHTNESS. REPLACE WITH NEW SD AS NECESSARY TO ENSURE THAT THE SD IS WATER-TIGHT OVER ITS ENTIRE LENGTH.

2. BUILDING ROOFS SHALL BE COMPOSED OF A NON-POLLUTION GENERATING MATERIAL. ROOF DOWNSPOUTS SHALL BE PLUMBED THROUGH PIER DECK WITH DIRECT DISCHARGE TO CHANNEL.

APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:
NWS-2009-00056

IN: GUEMES CHANNEL
AT: ANACORTES
COUNTY: SKAGIT
STATE: WASHINGTON
DATUM: MLLW = 0.00'
UPI NUMBER: 619049-09-01
LATITUDE: 48.51567'N LONGITUDE: 122.631903'W

LEGEND AND NOTES

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SHEET: 32 of 39

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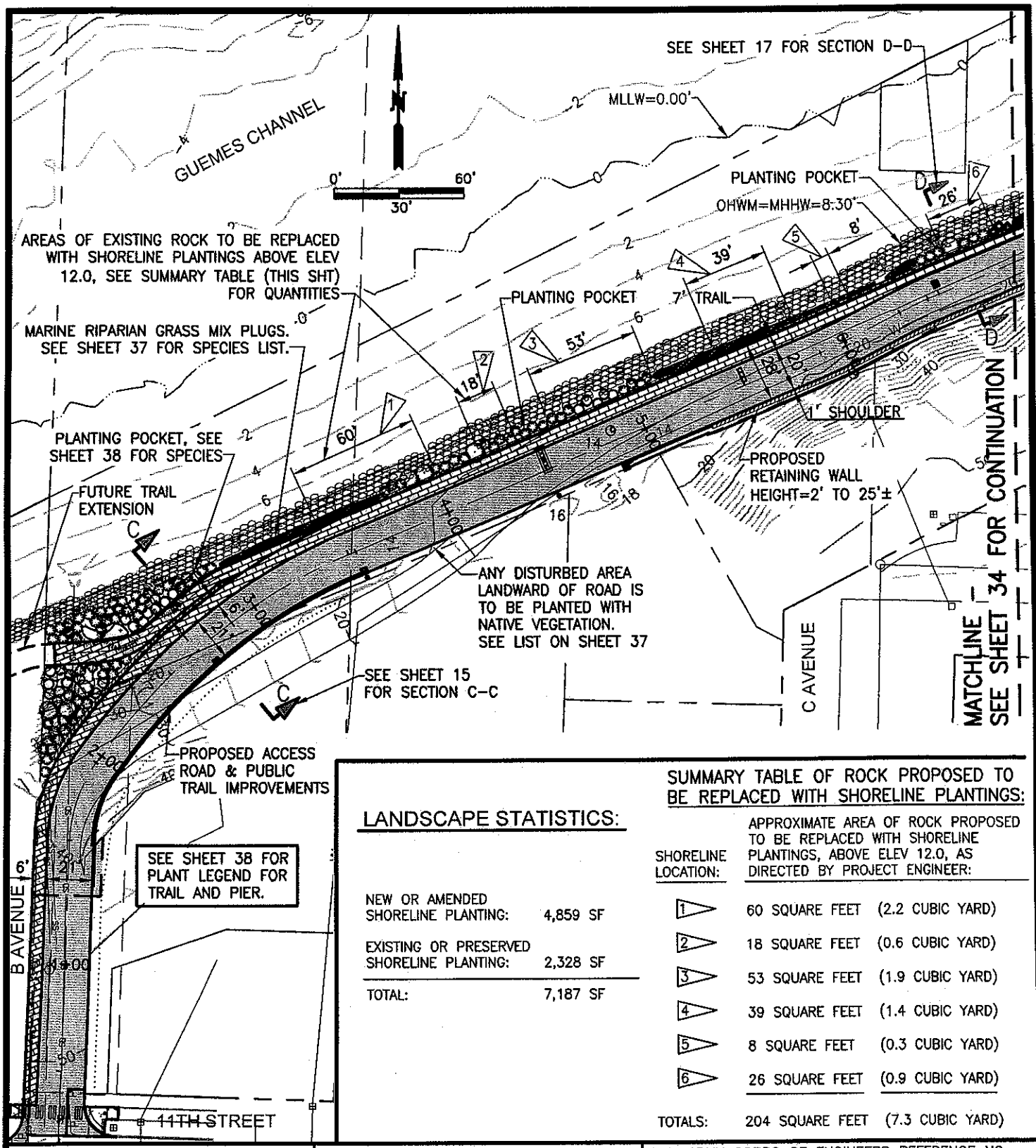

LANDSCAPE STATISTICS:

NEW OR AMENDED SHORELINE PLANTING:	4,859 SF
EXISTING OR PRESERVED SHORELINE PLANTING:	2,328 SF
TOTAL:	7,187 SF

SUMMARY TABLE OF ROCK PROPOSED TO BE REPLACED WITH SHORELINE PLANTINGS:

SHORELINE LOCATION:	APPROXIMATE AREA OF ROCK PROPOSED TO BE REPLACED WITH SHORELINE PLANTINGS, ABOVE ELEV 12.0, AS DIRECTED BY PROJECT ENGINEER:
1	60 SQUARE FEET (2.2 CUBIC YARD)
2	18 SQUARE FEET (0.6 CUBIC YARD)
3	53 SQUARE FEET (1.9 CUBIC YARD)
4	39 SQUARE FEET (1.4 CUBIC YARD)
5	8 SQUARE FEET (0.3 CUBIC YARD)
6	26 SQUARE FEET (0.9 CUBIC YARD)
TOTALS:	204 SQUARE FEET (7.3 CUBIC YARD)

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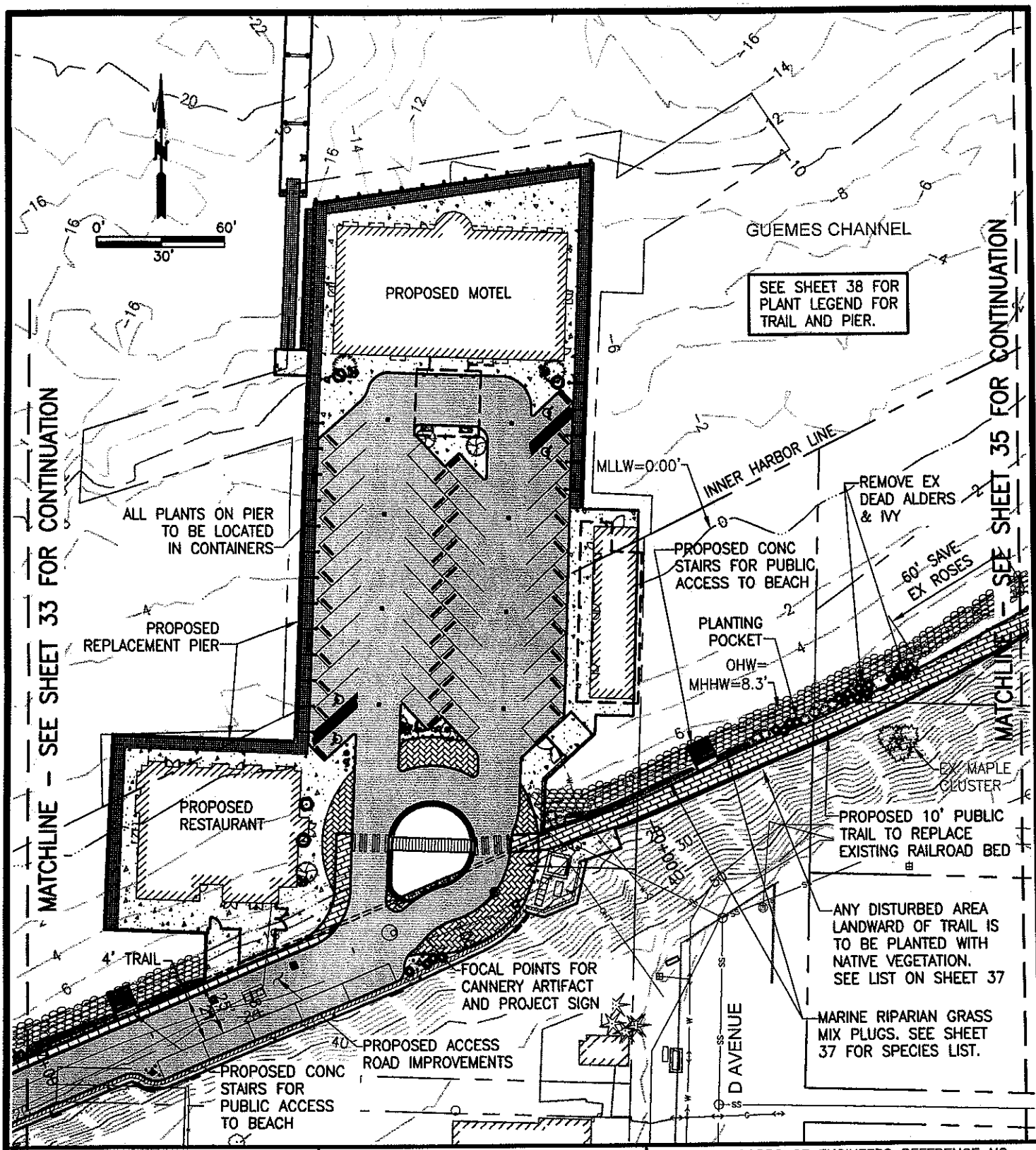
PROPOSED ROADWAY AND TRAIL PLANTING PLAN

DATE: 08/14/2009
REVISION DATE: 12/02/2009
SHEET: 33 of 39



APPLICANT: GEMS LLC
2326 11TH STREET
ANACORTES, WA. 98221
ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

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PROPOSED
PIER AND TRAIL
PLANTING PLAN

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SHEET: 34 of 39

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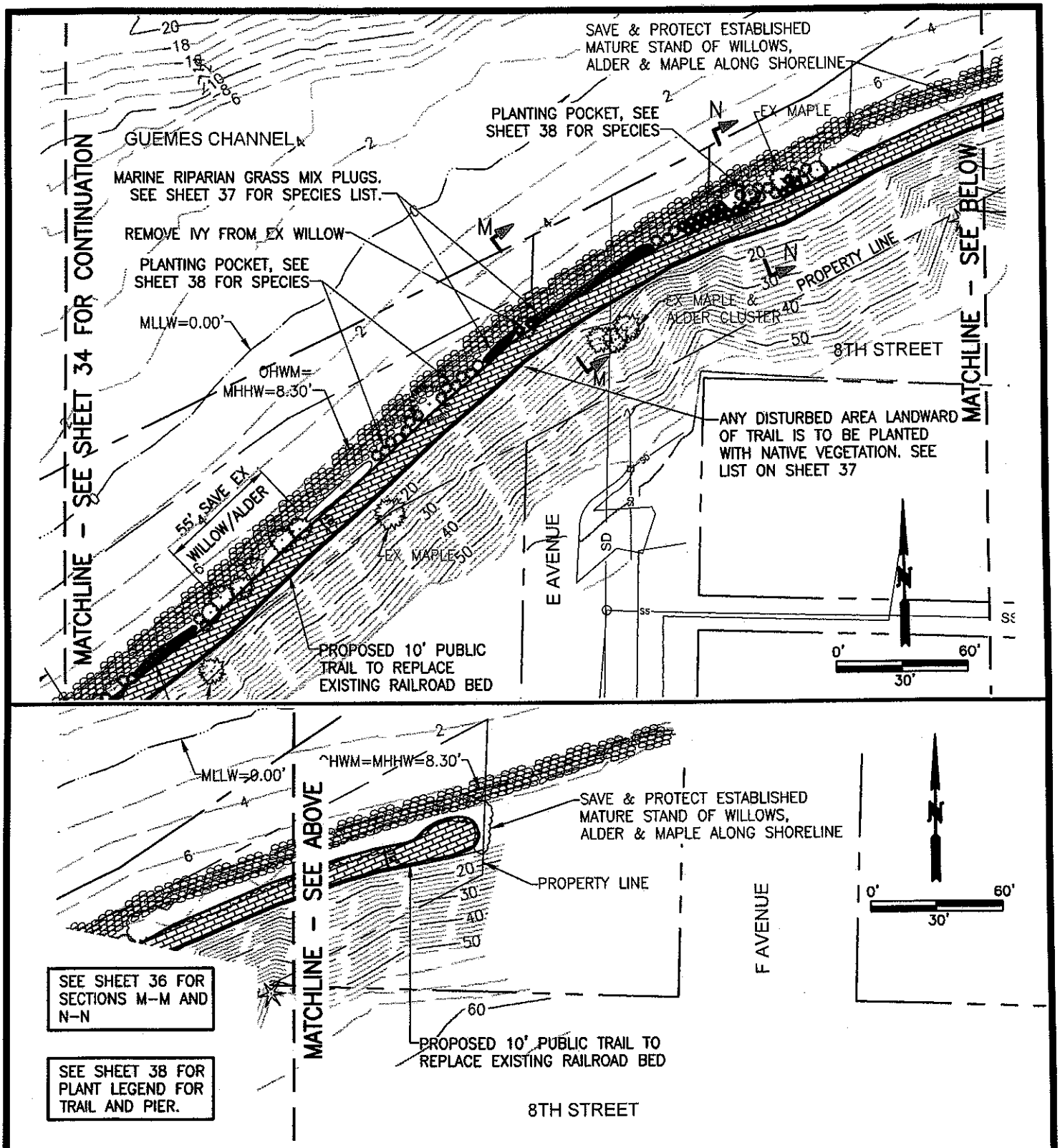

APPLICANT: GEMS LLC
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ATTN: FARAH ALLY

PURPOSE: PIER RENOVATION AND SHORELINE ACCESS IMPROVEMENT

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PROPOSED TRAIL PLANTING PLAN

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